FLANDERS DC

Kennis Studie

RESEARCH REPORT

THE ATTRACTIVENESS OF FLANDERS FOR INVESTMENT IN HEADQUARTERS

Priscilla Boiardi and Leo Sleuwaegen

JULY 2013

KNOWLEDGE PARTNER

VLERICK BUSINESS SCHOOL

CONTENT

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

Subsidiaries of Multinational Enterprises (MNE) located in Flanders have been an important source of innovation and growth for the region. However, new trends in the global environment, including the rapid rise of emerging countries, have fundamentally affected the position of Flanders for attracting foreign investment.

A study of UNCTAD in 2003 identified a strongly rising trend in globalisation. Influenced by the advancements in ICT and transportation technologies multinationals spread their value chain activities across different geographic locations maximizing the efficiency of each of the activities. As a consequence, companies' activities are spread across different countries and regions. Multinationals are looking for new mechanisms to coordinate these activities. The creation of regional headquarters is in line with this general activity relocation trend.

An initial analysis of the changing position of Flanders for attracting foreign investment as a result of these global relocation trends was made in an earlier FDC report: "Location choices across the value chain" (De Witte, Sleuwaegen, 2009). The study focused on the decoupling of activities worldwide following business model innovation trends and the implications of these trends for Flanders.

This project aims at extending and refining this research with a focus on regional headquarters (RHQ).

After giving a definition of headquarter and regional headquarter in Chapter 2, Chapter 3 analyses the main factors that are important for a company when choosing the location of the headquarter functions. Chapter 4 gives an overview of the recent trends at world level in the attraction of headquarters, using data from the "fDiMarkets.com – Cross border investment monitor" of the Financial Times. Chapters 5 and 6 consider the position of Flanders for attracting new headquarter projects and compare the location attractiveness of its main cities with the main European and world cities. Chapter 7 analyses the attractiveness of Flanders using the model developed in Chapter 3. Chapter 8 analyses the co-location of headquarters and R&D development activities in Flanders to assess whether there is a link between the location of headquarters and the location of R&D activities. Chapter 9 draws conclusions and some policy recommendations in terms of the attractiveness of Flanders for headquarters.

2. DEFINING A HEADQUARTER

2.1. THE CORPORATE HEADQUARTER

The definition, functions and activities performed by headquarters have been changing over time. The Financial Times gives a very minimal definition of headquarters, identifying them as "…the head office or main building of an organization[*]". A more extensive definition of headquarters describes them as the main point of coordination of a corporation's activities. In particular, an headquarter serves as central point of decision for strategic planning, corporate communications, tax, legal, marketing, finance, HR, IT, and procurement.

The literature offers a large number of definitions of headquarters. Porter (1990) describes a headquarter as a corporation's home base, where the strategy is set, core product and process development takes place and where the essential and proprietary skills reside. Similarly, Campbell et al. (1994) describe the headquarter as the parent organization in which people work at levels above or outside the business units, implying that headquarters perform more strategic and coordination tasks at the corporation's level. Baaij et al. (2004) identify corporate headquarters as central administrative offices performing essential administrative and managerial tasks for the organisation.

Deschryvere (2009) gives a more pragmatic definition of headquarters. In his view global headquarters have three essential elements: (1) A global decision-making centre, where top management has an official location, (2) an expertise centre in which a series of headquarter functions are performed and (3) a fiscal legal centre where the company is legally domiciled.

Baaij et al. (2004) identify three types of headquarters: a minimum headquarter, a value adding headquarter and a shared service headquarter. The minimum headquarter is the statutory seat of the company and plays a legal and financial role. The second type of headquarter is the value adding headquarter, which fulfils the role of strategic guide and is in charge of leveraging competences and enhancing synergies. The third and last type of headquarter, the shared service headquarter, is established because of economies of scale, scope or specialization in providing services to several units of the organisation. Unfortunately, a sharp delineation of functions such as the one described by Baaij et al (2004) rarely exist in reality. Moreover, what is true for central headquarters also applies to regional headquarters, as illustrated in the next section.

[*] http://lexicon.ft.com/Term?term=headquarters

2.2. THE REGIONAL HEADQUARTER

2.2.1. What it does

As a consequence of the increasing globalisation pressures, multinationals tend to unbundle the value chain activities across multiple locations. Relocation of value chain activities is increasingly done to maximise efficiency.

Firms move their location because of different drivers (Dunning 2009). First of all firms decide to locate in a certain area to be close to better suppliers and partners (the so-called resource-seeking relocations). Other firms relocate in order to look for market opportunities in new countries therefore following market-seeking drivers. Firms also relocate for efficiency-seeking reasons as they thrive to reduce costs and have access to specialised cluster advantages. One last type of drivers are the so-called strategic-assets-seeking: companies decide to locate abroad in order to have access to new markets for R&D, new demands preferences, etc.

As a result, multinationals are in need for coordination mechanisms not only at the corporate level, but also at the regional level. For these reasons MNEs have started establishing regional headquarters. Laamanen et al.(2011) define the regional headquarter as an headquarter that administers a firm's regional activities across multiple countries and consolidates the results before reporting them onwards to the corporate headquarter.

Another reason behind the establishment of a regional headquarter is the need to locate the typical headquarters functions close to markets that are relevant for the company. MNEs establish regional headquarters to control and manage regional activities (Davis et al. 2008, Lasserre 1996, Laamanen et al. 2011). Creating a regional headquarter as a separate structure also allows the company to separate the administrative functions from other functions and have better control of the local businesses (Davis 2008).

Five main functions have been identified in the literature as key regional headquarters functions (Chandler 1991, Birkinshaw et al 2006). First of all the regional headquarter locally executes the overall strategy of the company. Moreover, it is in charge of pursuing the company's long term growth in the region. It monitors and coordinates the production activities and guarantees the efficient information processing of all the subsidiaries present on the territory. One last important regional headquarter function is providing administrative services such as accounting and marketing.

2.2.2. Headquarter relocation

Setting up a regional headquarter often goes together with a decentralisation or relocation of parts of the central or other headquarters. Headquarters perform three main functions: they are the financial, legal and managerial centre of the company. Because of the globalisation of activities, companies can decide to unbundle these three functions and locate them where they can be performed more efficiently (Desai 2009). The location of the legal functions of a company, for example, can be chosen to minimize taxation. The choice of different locations for different functions will maximise the overall value of the firm.

Empirical analysis points out that companies rarely relocate entire headquarters. In practice there are various forms of headquarters relocations. Direct relocation entails the physical movement of the entire global headquarter, while indirect relocation implies the decentralisation of different headquarter functions (Barner-Rasmussen et al (2004); Desai, 2009). This second type of relocation seems to be preferred by the majority of companies.

Impact on performance

Deciding to set up a regional headquarter or relocate the headquarter, or parts of it, can bring numerous advantages. On top of the cost-savings considerations already outlined above, companies benefit from spillover effects generated by being located close to other companies. Knowledge flows better among companies located close to each other (Head et al (1995). The concentration of headquarter activities in cities constitutes an efficient way to acquire and exchange information and to generate scale and spillover effects.

Several studies have looked at how headquarter relocation impacts a company (Gregory et al 2005, Pirinsky et al 2006) and at factors affecting the success of a headquarter relocation.

The reason behind the relocation decision plays a major role on its success. headquarter relocations based on rational cost-savings have a positive impact on stock prices, while headquarter relocations based on management interest or self-interest results in a negative market response (Ghosh et al 1995).

The decision of a company to relocate its headquarter impacts not only the company taking such decision, but also the region where the company relocates to. While at company level relocating the headquarter has an impact on the bottom line, at regional level being capable of attracting headquarters has a positive impact on the economic welfare, tax income and employment generated.

The presence of headquarters has a positive impact on the region's wealth. Headquarters create added-value jobs (Ernst & Young 2005), bring highly paid jobs and the associated tax income (Becker 2009) which also translate into more consumption and related income (Laaamanen et al 2012). Moreover the presence of headquarters increases the availability of capital and of management skills (Calgary report, 2010).

Public authorities at all levels have an interest in attracting headquarters and typically do so through tax incentives, investments in infrastructure and in education (to generate high skilled labour force). In the next chapter we will look in more details at the location factors affecting headquarter relocation decisions in order to assess whether the current policy measures are consistent with what companies perceive to be key when deciding where to locate their headquarter.

3. WHAT EXPLAINS THE LOCATION OF A REGIONAL HEADQUARTER?

The decision on where to locate the corporate headquarter and the decision on whether to establish regional headquarters is part of a company's international restructuring strategy, often referred to as the third stage of internationalisation. The first stage – or first degree of internationalisation – consists of the relocation of the production facilities. A second stage consists in the movement of the R&D department. The third and last stage of internationalisation consists in the relocation of the headquarter (Braunerhjelm 2003). Companies are increasingly relocating their headquarter, albeit at a much lower rate than they are relocating production facilities (UNCTAD 2003).

Headquarter functions prefer large cities as location centres. A recent study based on Fortune 500 companies relocating their headquarters in the period 1975-2005 shows that New York was the preferred destination for the headquarter relocation (Testa, 2006). Relocating across state borders seems to be more of a US trend than a European trend. This is possibly due to the higher similarity across US states, which share a common language and a similar legislation. At EU level not only language barriers exist but also – despite the market integration – barriers created by conflicting regulation (Baaij et al 2004).

Companies are increasingly creating regional headquarters to unbundle the typical headquarter functions, such as marketing and legal functions and therefore perform them more efficiently in locations where the conditions for the specific activities are optimal (Desai 2009).

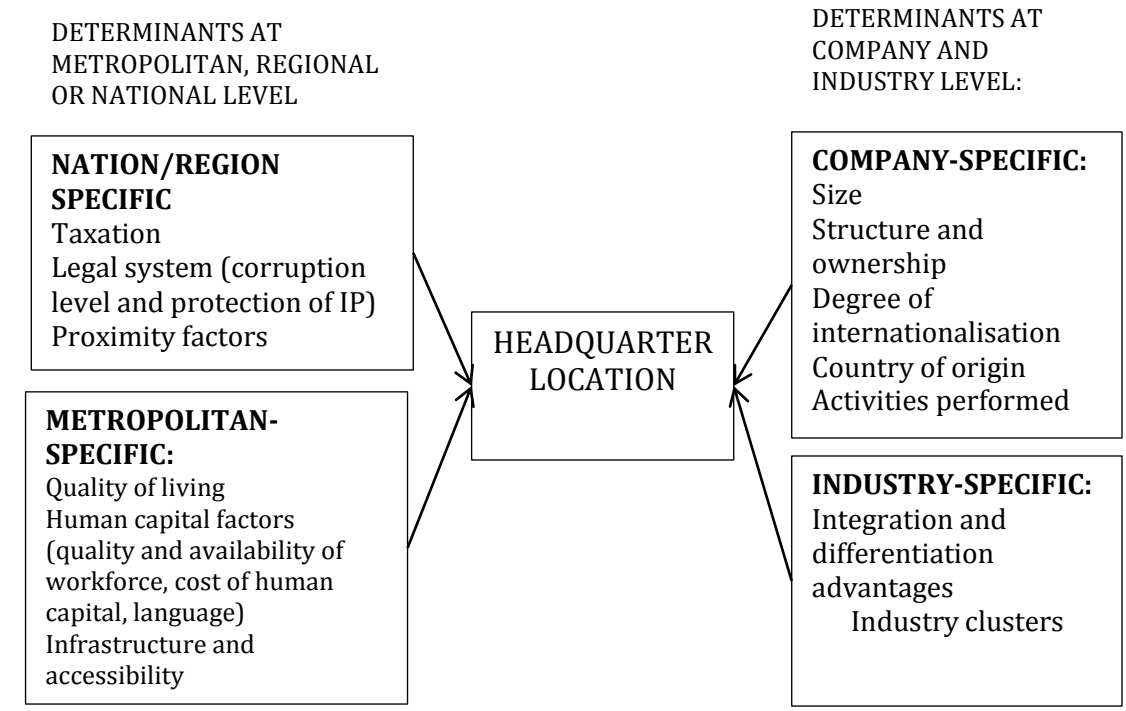
In the next section we will look at the most important factors that influence the decision to relocate a headquarter or a headquarter function in a specific area with certain characteristics and the importance of each of these factors.

3.1. LOCATION FACTORS FOR HEADQUARTERS

A large body of literature has looked into the main factors explaining multinationals' decision on where to locate the headquarter (Forsgren et al 1995, Strauss-Kahn et al. 2009, Baaji et al 2004, Laamanen et al 2011, Klier et al 2002, Bel et al 2008).

The framework proposed by Baaij et al (2004) gives a good overview of the different groups of factors that affect the location of a corporation's centre (see Figure 1).

Figure 1: Determinants of headquarter functions locations



(adapted from Baaij et al 2004)

3.1.1. National and regional specific factors

Most of the research on location factors argues that the level of corporate **taxation** in the host country is significantly correlated with the decision on where to locate headquarters. The headquarter typically is the location where profits are taxed. Business tax rates, tax exemptions for foreign-source profit and fiscal rules have a high impact on the decision on where to locate the headquarter.

There is a large body of empirical research on the impact of corporate taxation on the location decisions of MNEs. Strauss-Kahn et al (2009) analysed 30,000 US headquarters moving inside the US and found that a 1% increase in the corporate tax rate translated into a 4% decrease in the probability of locating an headquarters in the area. Similarly, using European data, Becker et al (2009) analysed 11,000 municipalities in Germany and came to the conclusion that a decrease of 20% in fiscal pressure leads to one extra headquarter in a municipality.

Tax exemptions of foreign source profits also have an impact on location decisions. Voget (2010) for example found that a sample of 140 MNEs that relocated their headquarter in the period 1997-2007 showed a tax avoidance behaviour. In fact an additional tax on foreign source profits increased the probability of these firms to move to another location. Similarly, stricter CFC* rules resulted in an increase in the relocation probability .

* Controlled Foreign Corporation

Personal taxation has also an important impact on the location decision. High personal taxes make it harder to attract top management.

Another equally important factor at national level is the efficiency of the legal system. Two aspects related to this are particularly significant: the **protection of IP**[*] and the **level of corruption**.

The level of **IP protection** in the host country is relevant for a company deciding to relocate its headquarter because it allows to re-use the legal entity established as headquarter also to protect the IP, without the need to establish an ad-hoc corporation. MNEs move to countries with strong IP rights protection (Branstetter et al 2006).

Some studies find a high correlation between high **corruption** and relocation (Kwok et al 2006, Cuervo-Cazurra 2006), especially due to the higher operational and uncertainty costs generated by high corruption.

Proximity to customers, other units of the companies and institutions is an important factor when choosing where to (re)locate a headquarter. In general, most researchers argue that the most appealing reason for a multinational to locate a headquarter in a certain country is proximity to major clients and other institutions with whom the company needs to have face-to-face conversations on a regular basis (Krohe Jr 2009, Birkinshaw et al 2006, Holt et al 2006, van den Berghe 2005). Also the proximity to other units (sales, production,…) of the company matters: the larger the distance of the headquarter from the home base the higher the costs of communication and coordination and therefore the lower the probability that an MNE will locate its headquarter there. Proximity is also an important factor that explains the decision of an MNE to locate in main cities. Companies locate their headquarters in metropolitan areas, to benefit from agglomeration advantages.

3.1.2. Metropolitan factors

Firms tend to choose large cities as locations for their headquarters. There are a number of reasons behind this choice. Kher (2006), for example, has found that headquarters are attracted by large metropolitan areas that offer a highly educated workforce, top universities and high medical standards.

The decision on where to locate a headquarter is influenced by the **quality of life** in the destination country. Baaij et al (2004) define quality of life as the presence of good restaurants and hotels, cultural activities, education institutions and a high life expectancy. Talented people that need to perform headquarter activities are attracted to regions characterised by high standards of quality of life (Florida 2002).

[*] Intellectual property

MNEs deciding to locate their headquarter in a certain area will look for the **availability of skilled labour force** in that area (Lindholm 2009, Becker et al 2009, Fujita et al, 2004, Baaij et al 2004). Recent studies have found that the human capital factor can go as far as counterbalancing the negative fiscal effects factors (Becker et al 2009).Some studies argue that deciding to locate in an area with high unemployment rates of high educated people implies having access to a large amount of available labour force (Friedman et al 1992). Conversely, Strauss-Kahn et al (2009) argue that observing **high wages** in a country increases the probability of moving the headquarter to that country. High wages are often considered a proxy of the presence of high quality human capital in the area.

Another important factor related to human capital is the **language** spoken in the country. Luo et al (2006) show that language differences are a barrier to negotiate with the workforce, which implies that moving to countries that share a similar language is always preferable. However, recent studies argue that, although language similarity plays a major role, with the increase in English-speaking labour force the decision to locate in a country where a different language is spoken does no longer constitute a major drawback (Laamanen et al 2011).

The **availability of adequate infrastructure** makes cities more attractive as headquarter location. A good ICT* infrastructure is a key factor. The availability of a good transport infrastructure is equally important for the accessibility of the location. A recent paper by Bel et al (2008), with data on a sample of 1,000 European firms, showed that a 10% increase in the number of intercontinental direct flights leads to a 4% increase in the probability of a company locating in a certain area. Recent reports by Ernst and Young (2005) and Arthur D Little (2009) also show that the accessibility of a country and its transport infrastructure have an impact on the location decisions of MNEs.

3.1.3. Industry-specific factors

Companies make their headquarter location decisions not only on the basis of the characteristics of the potential destination countries, but also based on industry-specific conditions and firm-specific conditions.

Concerning industry-specific conditions, Baaij et al (2004) identify two main drivers at industry level influencing the headquarter location choices of MNEs.

The first one – **integration and differentiation advantages** – is based on the finding that depending on the industry a company will benefit from integrating activities at global level versus differentiating them to local levels, depending on the standardization of the good or service. In case integration advantages prevail, the proximity of the corporate centre functions to other business activities will be low. Conversely, if responsiveness to local conditions is more important the corporate centre functions will be more dispersed.

The second main industry-related determinant is the importance of **industry clusters**. In industries where geographical cluster advantages are important for sharing knowledge, companies will tend to co-ordinate activities from their operations within these clusters.

* Information and Communication Technologies

3.1.4. Company-specific factors

A certain number of characteristics of a company have been identified an influence on the relocation decisions of MNEs.

Size plays a role. Small companies are more mobile due to the higher cost of site relocation and of recruiting incurred by larger firms (Brower et al 2004, Benito et al 2011).

The **structure of a company's ownership** also has an impact on the decision on whether to relocate. Stock listed companies are under a constant competitive pressure to cut costs and therefore will more easily decide to relocate activities. State-owned companies, on the other hand, will tend to be less likely to relocate their headquarters abroad, as they typically perform activities that Governments want to hold on national soil.

Although some studies argue that the **degree of internationalisation** of a company plays a positive role on the decision to relocate the headquarter (Forsgren et al 1995, Birkinshaw et al 1996) recent studies have surprisingly found that this is not always the case. Working on a sample of 30 listed Norwegian MNEs Benito et al (2011) found that there is no correlation between the degree of internationalisation of these companies and the amount of their activities relocated abroad.

Holt et al. (2006) identify three main company-specific factors influencing the decision on where to locate headquarters.

First of all the **country of origin** of the parent company has an influence on the location decision. Many studies have shown that the behaviour and decision criteria of multinationals are influenced by the nationality of the parent company (Hofstede 1994, Hennart & Larimo 1998). Holt et al. (2006) make a distinction on the location variables between North-American, European and Asian firms.

According to this study North-American based companies tend to pay more attention to factors which improve the business efficiency, such as similarities with the home country, established infrastructure and effective regional links. Besides business efficiency, North-American companies also take the incentives offered by the local Governments into account. Moreover, American MNEs seem to keep in high consideration the political stability and infrastructure of the destination country (Heenan 1979).

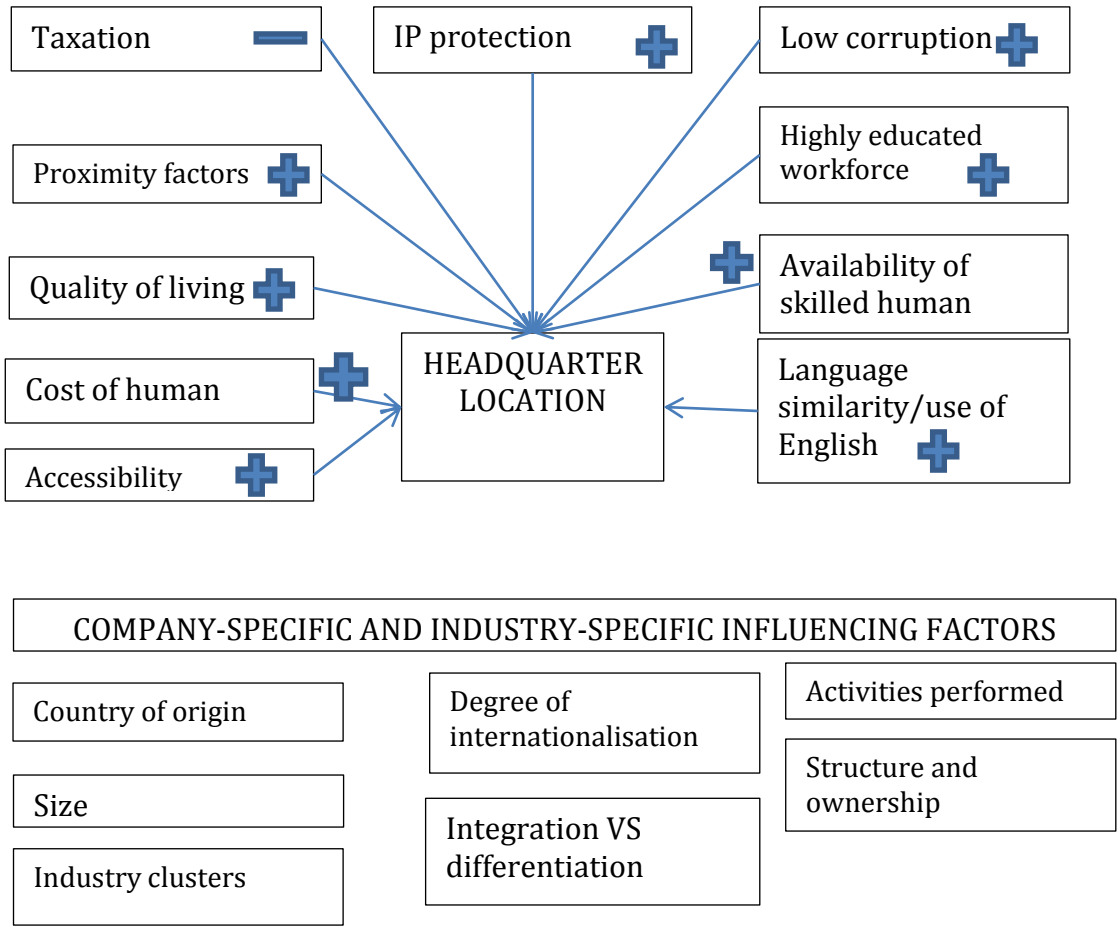
European companies are mainly concerned about strategic intangibles, such as the quality of human capital and IP protection. European companies also try to improve their bottom line when relocating, therefore preferring locations where they can minimize their operating costs (Holt et al., 2006).

Asian based companies are mostly concerned about the favourable incentives offered by the local Government, low living costs and a supportive business environment (Holt et al., 2006).

3.1.5. Business or corporate function

The **activities performed by the headquarter** influence the location decision. Business units headquarters coordinate the activities at local or regional level and report to the corporate headquarter and therefore are established in locations where the company has a relatively high level of production and service activities and where the investment climate is favourable. Differently from the business units headquarter, the location of corporate headquarter functions is rather independent from the other activities that the company performs. As a consequence the location choices of the corporate headquarter are less based on proximity to the company's production sites but more sensitive to urban agglomeration factors, including closeness to financial markets and a supportive work and life environment.

Figure 2: Main factors influencing headquarters' location and relocation decisions



4. GLOBAL TRENDS IN THE ATTRACTION OF HEADQUARTERS

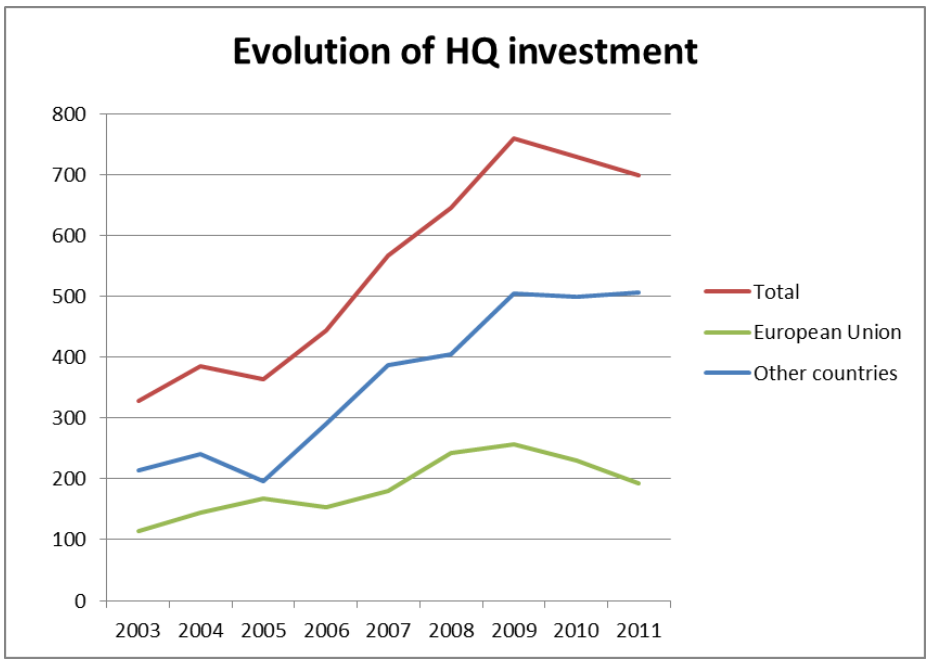
This section analyses the most recent trends in terms of attraction of headquarters using mainly the "fDiMarkets.com – Cross border investment monitor" database of the Financial Times intelligence unit. This database contains information over 122,855 investment projects announced and executed by 54,471 MNEs at worldwide level over the period January 2003 – April 2012[*]. The dataset contains detailed information over the new projects undertaken by international firms, including greenfield investment (completely new projects), expansions (for example: extension of existing facilities or purchase of new machinery) and co-location (for example: investment in a business activity different from the core one)[†]. For each investment the database reports the name of the company, the source and destination country, the business activity and the sector in which the investment is made. Moreover an estimation of the value of the investment made and the number of jobs created is reported.

Data retrieved for the analysis performed in this section refer to the period January 2003 – December 2011 and focus on headquarters projects. The global trends for location of headquarters are based on data retrieved on a total of 4,920 new headquarter projects in 89 countries over the period 2003-2011.

Figure 3 shows the developments in headquarter investment over the period 2003-2011 at world level. As shown in the figure, 2009 was the peak year for the establishment of headquarters abroad, with a total of 760 new headquarters projects.

[*] Since 2012 is not complete yet and subject to multiple revisions we will use only the period January 2003-December 2011 for the analysis.
[†] It is important to note that the database contains no information on joint ventures or takeovers.

Figure 3: Number of new headquarters projects between 2003 and 2011



(source: fDiMarkets.com – Cross border investment monitor)

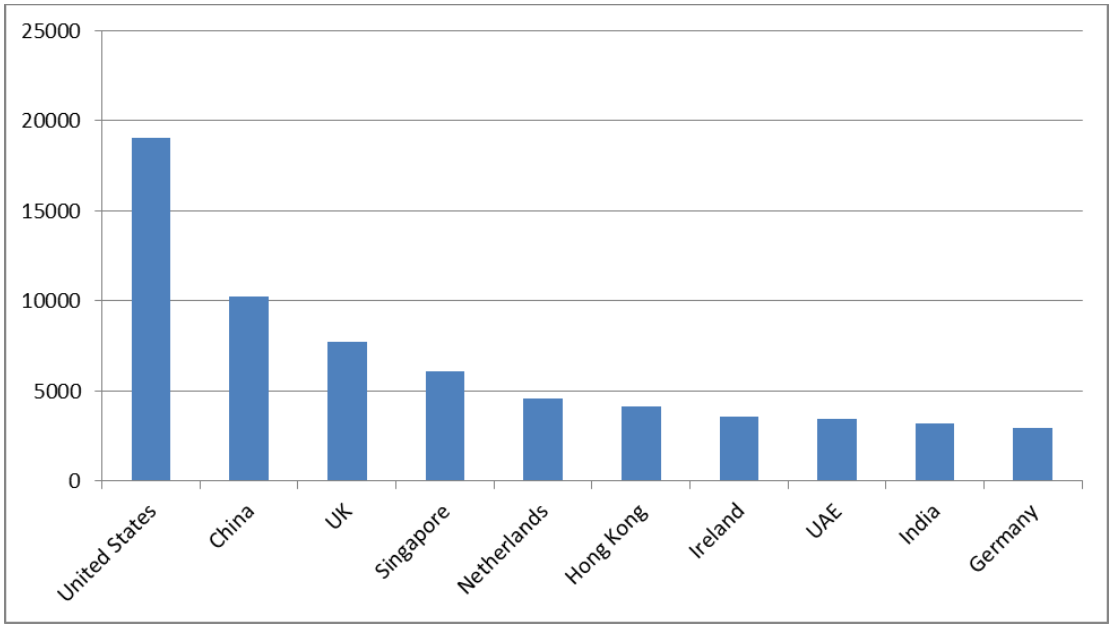
From 2003 to 2009 there has been almost a constant increase in the total number of headquarters established around the world. However, since 2010 this trend has inverted, and by the end of 2011 the number of new investment projects in headquarters went down by 8% compared to 2009.

The downward trend was particularly marked in the 27 EU countries. In the period 2003-2011 a total of 1,704 projects were executed in one of the EU 27 countries; about 35% of the total projects at world level. However, in the period 2009-2011 the number of headquarter projects in Europe experienced a sharp decrease, to a total of 193 projects in 2011, a 24% decrease compared to the peak value of 256 projects executed in 2009.

4.1. TOP COUNTRIES, REGIONS AND CITIES

Figure 4 shows the top 10 recipient of FDI in headquarter over the period 2003-2011.

Figure 4: Top 10 recipient countries of FDI in headquarters over the period 2003-2011.(Total investment. Million euros)



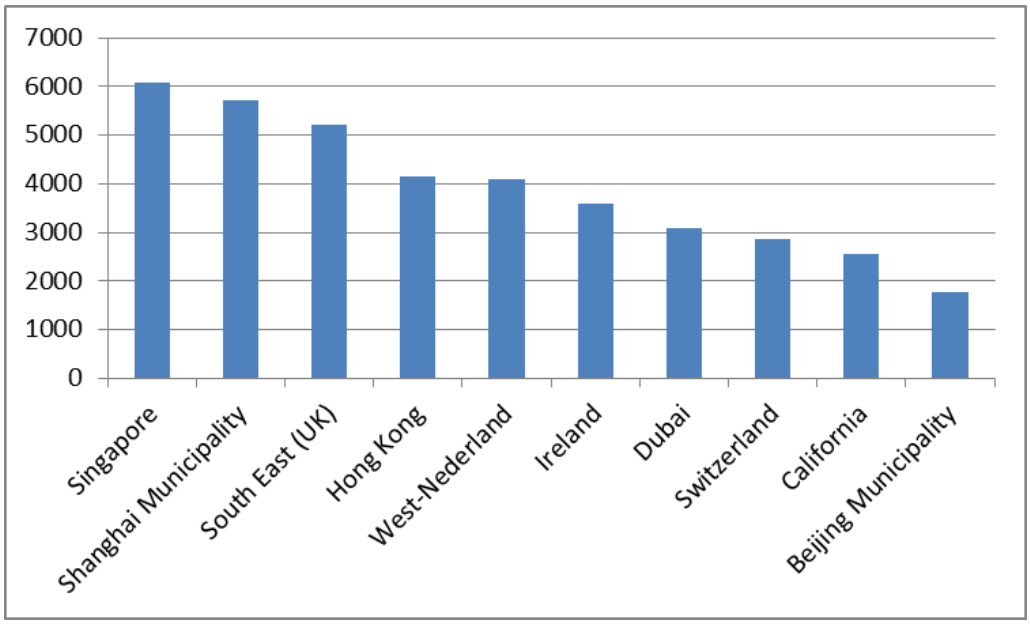
(Source: fDiMarkets.com – Cross border investment monitor)

As shown in Figure 4 the Unites States attracted the most new investment in headquarters over the period 2003-2011, reaching €19 billion euros, or 20% of the total world investment in headquarters over the 9-years period.

China reached the second position, with about €10 billion, or 11% of the total, followed by the UK (€7.7 billion, 8% of the total).

Belgium only reached the 21st position in the world ranking of most attractive headquarters destination countries, with a total of €847 million, about 1% of all investment in headquarters done by multinational companies for the period 2003-2011.

Figure 5: Top 10 recipient regions of FDI in headquarters over the period 2003-2011 (Total investment. Million euros)



(Source: fDiMarkets.com – Cross border investment monitor)

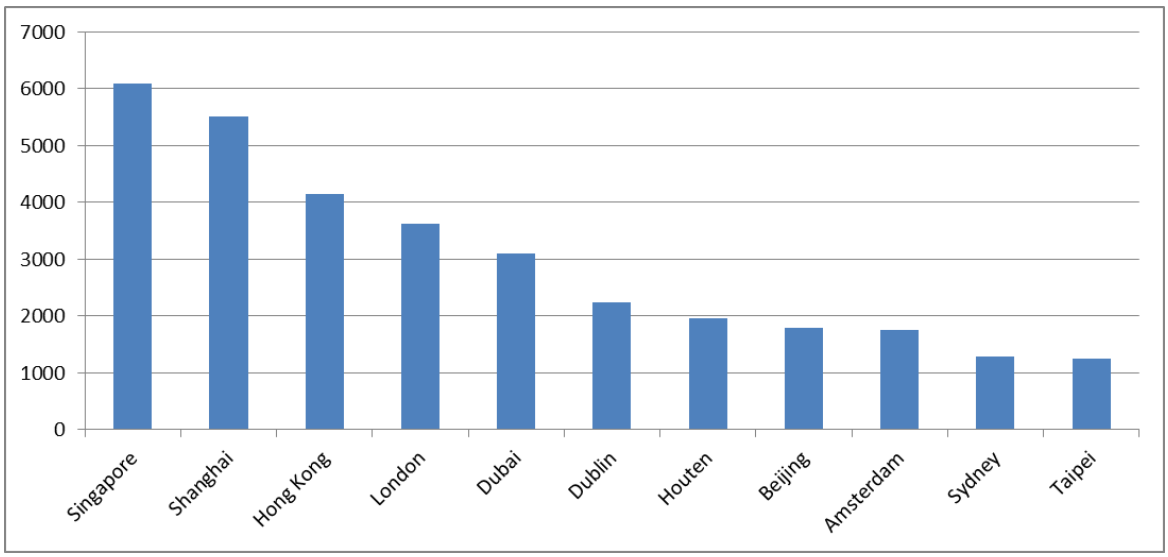
In terms of regions, however, the situation is slightly different. As shown in Figure 5 the only US state/region* that was in the top 10 was California, which reached only the 9th position. Singapore, Shanghai and South East UK (London area) were the three regions that attracted most of the new investment in headquarters over the period 2003-2011†. More specifically, Singapore attracted about €6 billion, or 6.4% of the total investment in new headquarter projects over the nine years, Shanghai attracted €5.7 billion (6% of the total) and South East UK attracted €5.2 billion (5.4% of the total).

The three Belgian regions (Brussels, Flanders and Wallonia) performed rather weak. Brussels and Flanders attracted a similar amount of investment in headquarters over the period 2003-2001, €330 million and €307 million respectively, both about 0.3% of the total, reaching the 61st and 67th position respectively. Wallonia attracted less investment in headquarters in the period 2003-2011, with a total of €155 million, 0.2% of the world total.

However, an analysis at regional level is not without problems. First it is very difficult to compare regions at world level for reasons related to size and definition. Second, multinationals tend to establish headquarters in cities, given the presence of some specific location factors. For these reasons it is more relevant to look at the top ten cities in terms of attraction of FDI in headquarters at world level, as shown in Figure 6.

* The definition of region is based on a classification which is based on size. Smaller countries (such as Ireland) are considered as one unique region because of their relatively smal size.
† The database contains information on a total of 291 regions at worldwide level.

Figure 6: Top 10 recipient cities of FDI in headquarters over the period 2003-2011 (Tot investment. Million euros)



(Source: fDiMarkets.com – Cross border investment monitor)

As shown in Figure 6, this top 10 is dominated by south-east Asian cities, with Singapore, Shanghai and Hong Kong in the lead. Singapore is the city that attracted the largest share of investment in headquarters in the period 2003-2011 with a total of over €6 billion, or 6.4% of the total, followed by Shanghai and Hong Kong (€5.4 billion and €4.1 billion respectively). London is the only European city in the top 5, with a total of €3.6 billion invested over the 9-years period in new headquarter projects, about 3.8% of the total.

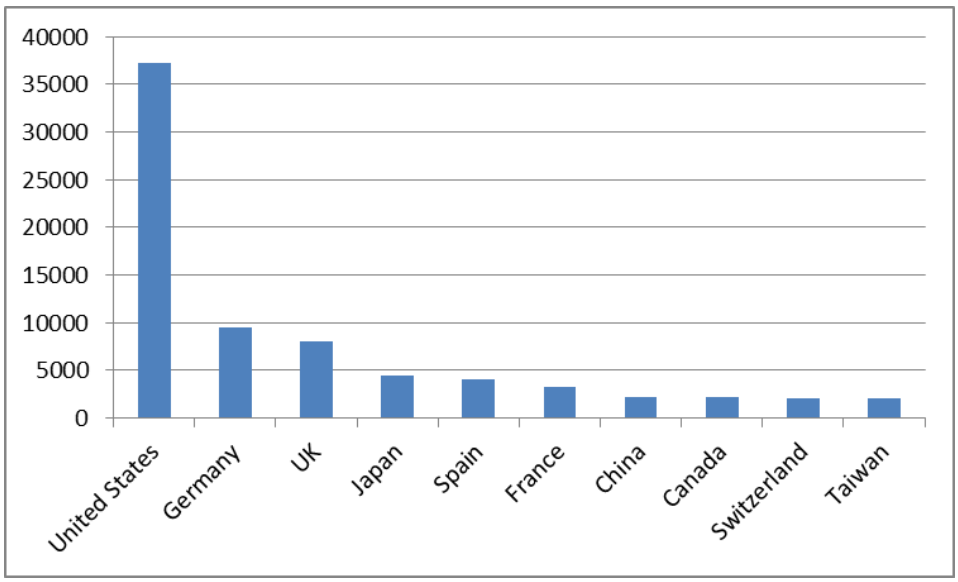
This difference in performance can be explained by two main factors. First of all corporations set up headquarters to be able to respond faster to the needs of the local markets. As Asian markets are the fastest-growing in the world more and more MNEs are establishing headquarters in this region. The popularity of London and Dublin, on the other hand, can be explained by the language similarity: most of the headquarters set up in the period 2003-2011 were set up by US multinationals.

Belgian cities do not rank particularly high in terms of attraction of headquarters. Brussels only attracted about 0.3% of the total investment in new headquarters projects over the nine-years period, while Antwerp attracted less than 0.08% of the total investment in headquarters at world level.

Figure 7 shows the top 10 source countries in terms of investment in new headquarters projects over the period 2003-2011. These countries represent the country of origin of the companies that invested most in headquarters. Once again the US lead the ranking, with €37 billion, or 39% of the total. US multinationals have been the most active companies establishing regional headquarters over the past nine years. US multinationals have been setting up regional headquarters in Europe and Asia to be faster in responding to the needs of the European and Asian markets (UNCTAD 2003).

The second and third source countries for investment in headquarters – at quite some distance from the US – were Germany and UK, with a total of €9.6 and €8 billion respectively (10% and 8% of the total).

Figure 7: Top 10 source countries for FDI in headquarters over the period 2003-2011.(Total investment. Million euros)



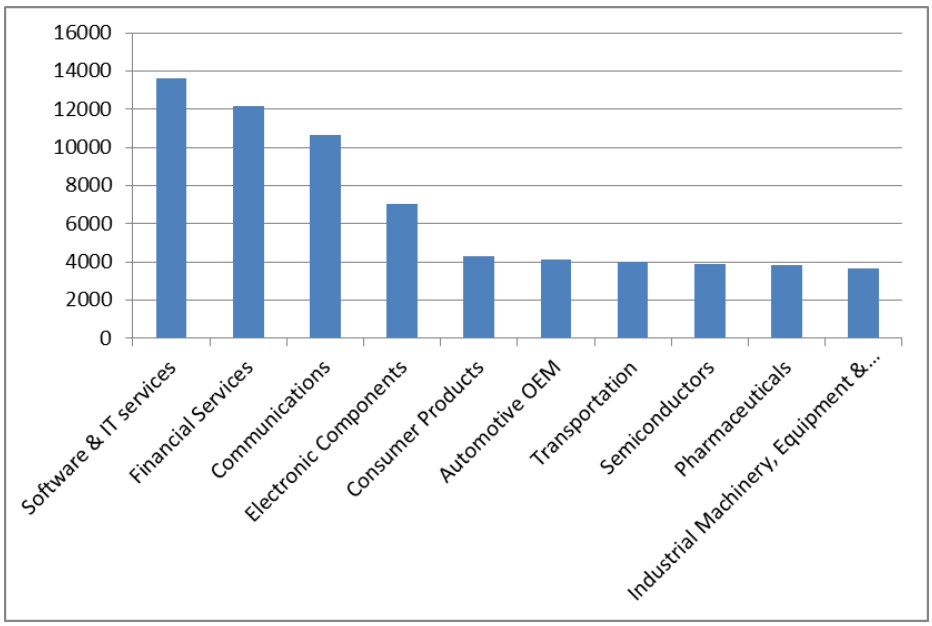
(Source: fDiMarkets.com – Cross border investment monitor)

It is interesting to notice that while the rankings of recipient regions and cities tend to put Asian (and especially south east Asian) regions and cities in the lead, this is less the case for source countries, where the US and a small number of European countries still account for a very large share of the total investment in headquarters made over the period 2003-2011.

4.2. TRENDS BY SECTOR

Figure 8 shows the top 10 sectors for new projects in headquarters in the period 2003-2011 at world level.

Figure 8: Top 10 recipient sectors of FDI in headquarters over the period 2003-2011.(Total investment. Million euros)



(Source: fDiMarkets.com – Cross border investment monitor)

"Software and IT services" is the sector in which most of the new investment in headquarters was generated. MNEs invested about €13.6 billion in new headquarters in the period 2003-2011 in the "software and IT services" sector, about 14% of the total. The reasons behind this surge are linked to the numerous young, dynamic and expanding firms and the limited sunk costs for investment in regional headquarters in this industry.

The second most important sector in terms of investment in new headquarters in the period 2003-2011 was "Financial services", with a total of about €12 billion or 13% of the total. "Communication" ranked third with €10 billion, or 11% of the total. Overall, 70% of the total investment in new headquarters projects at world level in the period 2003-2011 was generated in one of the top 10 sectors, and 50% of the total was generated in the top 5 sectors.

5. FLANDERS' POSITION IN ATTRACTING FDI: GENERAL OVERVIEW AND FOCUS ON HEADQUARTERS

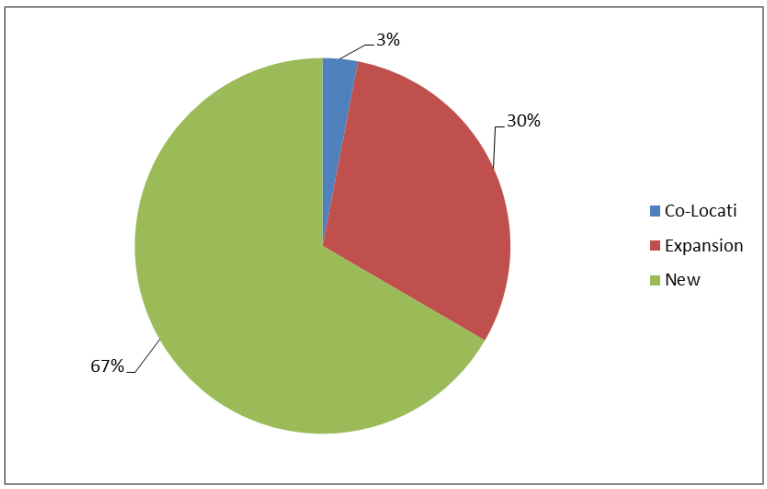
Flanders' position in attracting foreign direct investment (FDI) and, in particular, FDI in headquarters, is analysed using the "fDiMarkets.com – Cross border investment monitor" database of the Financial Times

Section 5.1 assesses Flanders' position in attracting headquarters in comparison with all other FDI. Section 5.2 then focuses on Flanders' position in attracting FDI projects in headquarters. Section 5.3 provides a comparison between Flanders and other European regions to assess the performance of Flanders in attracting headquarters vis-à-vis both top performing EU regions and Flanders' neighbouring regions.

5.1. HEADQUARTERS AND OTHER FDI IN FLANDERS

As shown in Figure 9, of the 563 FDI projects announced and executed in Flanders in the period 2003-2011, 67% were new greenfield investments, while 30% were expansions of existing operations. Only 3% were co-locations.

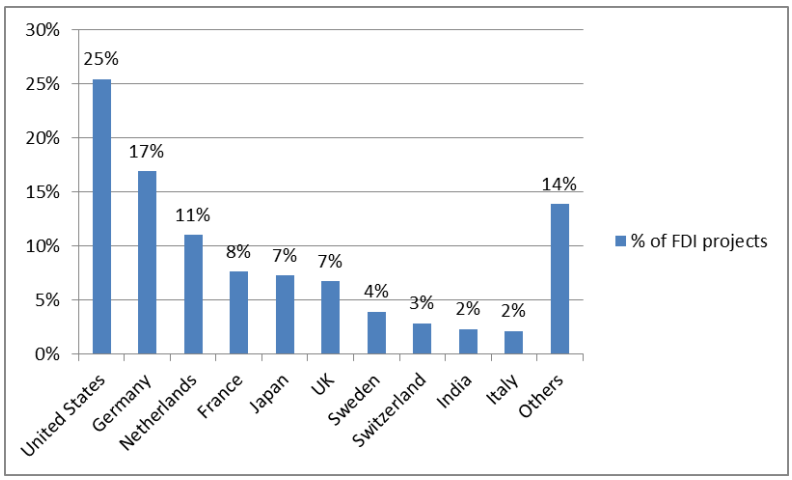
Figure 9: FDI projects in Flanders in all sectors and business activity by project type (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

Figure 10 shows the country of origin of the top investors in Flanders in the period 2003-2011. The top three investors were responsible for more than half of the total FDI projects announced and executed in Flanders in the period 2003-2011 (about 53% of the total).

Figure 10: Percentage of FDI projects in Flanders in all sectors and business activity by country of origin (2003-2011)

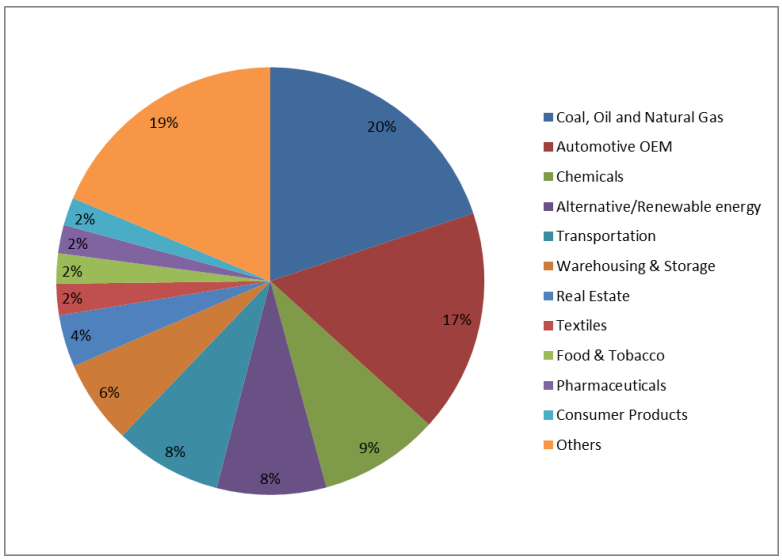


(Source: fDiMarkets.com – Cross border investment monitor)

US companies lead the ranking, with 25% of the total FDI projects. German investors follow with 17% of the total, while Dutch companies carried out 11% of the FDI projects in Flanders in the period 2003-2011.

The primary target *sector* for FDI projects in Flanders in the period 2003-2011 was “coal, oil and gas”, as shown in Figure 11. This sector attracted 20% of the total investment in FDI projects in the nine-years period. “Automotive OEM” and “chemicals” followed with 17% and 9% of the total respectively.

Figure 11: Investment in FDI projects in Flanders by sector (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

As shown in Table 1 during the period 2003-2011 Flanders attracted a total of 563 new investment projects in all sectors and business activities. The *business activity* that attracted most of these projects was "manufacturing", especially in the chemical sector, with 163 new projects (or 29% of the total), followed by "logistics, distribution and transportation" (128 projects or 23% of the total) and "sales marketing and support" (86 projects, 15% of the total). This points to the fact that the Flemish region has a relative specialization in "manufacturing" and "logistics, distribution and transportation": these two business activities seem to be capable of attracting a large number of FDI projects to the Flemish region. On the other hand, the region seems to be relatively less interesting as a location for activities such as "technical support centres", "recycling", and "shared services centres" (cfr. table 1).

Table 1: Number of new projects in Flanders by arrondissement and business unit (2003-2011)

	Antwerp	Gent	Hasselt	Mechelen	Turnhout	Halle-Vilvoorde	Brugge	Leuven	Sint-Niklaas	Tongeren	Other	Grand Total
Manufacturing	46	22	25	9	19	2	7	5	5	3	20	163
Logistics, Distribution & Transportation	44	12	12	17	9	4	8	2	2	3	15	128
Sales, Marketing & Support	29	12	1	10	5	9	3	6	3		8	86
Retail	37	3	3			3	5	1		2	3	57
Headquarters	**6**	**2**	**1**	**6**		**5**		**2**			**0**	**22**
Research & Development	1	3	2	1	5	2		2			4	20
Design, Development & Testing	6	1	2		1	2		3			4	19
Business Services	10	2	1	1		1					3	18
Electricity	7		2		1		2				3	15
ICT & Internet Infrastructure	1			1		5					2	9
Construction	1	1	3								0	5
Customer Contact Centre		1	1		1			2			0	5
Education & Training	2				1				1		1	5
Maintenance & Servicing	3						1				1	5
Shared Services Centre	2					1					0	3
Recycling									1		1	2
Technical Support Centre			1								0	1
Grand Total	195	59	54	45	42	34	26	23	12	8	65	563

(Source: fDiMarkets.com – Cross border investment monitor)

Table 1 also shows the destination of the FDI projects announced and executed in the period 2003-2011. The geographical unit taken for the analysis is the "arrondissement[*]". Antwerp was by far the arrondissement that attracted the largest number of FDI projects, with a total of 195 investments (or 35% of the total). Most of them were directed towards "manufacturing" and "logistics, distribution and transportation" (about 23% and 22% of all the projects in the Antwerp arrondissement, respectively), followed by "retail" and "sales, marketing and support" (about 19% and 15% of the total respectively). For the Antwerp arrondissement, FDI projects in headquarters represented only about 3% of the total FDI projects for the period 2003-2011. This points to the fact that the Antwerp region does not have a relative specialisation in headquarters, but it's mostly interesting as a location of business activities such as "manufacturing" and "logistics, distribution and transportation".

Gent and Hasselt were the second and third most attractive arrondissements for FDI projects in the period 2003-2011. In this nine-years period the two arrondissements attracted a similar number of projects, 59 and 54 respectively, or 10% and 9.6% of the total. Gent attracted FDI

[*] The federalized country Belgium geographically consists of 3 regions: Flanders, Wallonia and Brussels. The Flemish and the Walloon Region are then subdivided into 5 provinces each; the Brussels-Capital Region is neither a province nor is it part of one. Provinces are subdivided into arrondissements. The 43 administrative arrondissements (of which 22 Flemish, 20 Walloons and 1 for Brussels) are an administrative level between the provinces and the municipalities.

mainly in “manufacturing” (22 new projects, or 37% of the total), “logistics, distribution and transportation” and “sales marketing and support” (both attracting about 20% of the total new projects in the period 2003-2011) showing a clear specialisation in these three business activities. Similarly, Hasselt attracted 25 new projects in “manufacturing” (46% of the total) and 12 new projects in “logistics, distribution and transportation” (22% of the total). However, Hasselt attracted only one investment project in “sales marketing and support”.

In terms of new FDI projects in headquarters, Gent attracted only 2 new projects in the period 2003-2011, and Hasselt only one.

Table 2: Investment in new projects in Flanders by arrondissement and business unit (2003-2011, million €) -

Business Activity	Antwerp	Hasselt	Gent	Brugge	Turnhout	Mechelen	Halle-Vilvoorde	Leuven	Maaseik	Other	Total
Manufacturing	€2,179.12	€2,371.84	€1,439.92	€34.32	€413.73	€206.18	€28.82	€143.22	€180.95	€534.85	€7,532.96
Electricity	€3,084.47	€680.57		€1,067.11	€389.44				€24.33	€212.34	€5,458.27
Logistics, Distribution & Transportation	€2,756.12	€170.47	€238.79	€232.08	€209.38	€554.89	€84.60	€31.07	€20.74	€370.32	€4,668.44
Retail	€689.20	€61.16	€79.13	€55.55			€53.08	€19.76		€68.31	€1,026.19
Research & Development	€0.07	€28.97	€28.97		€363.50	€3.46	€146.58	€33.84		€62.59	€667.98
Construction	€143.59	€347.22	€143.59								€634.40
Sales, Marketing & Support	€243.53	€0.45	€59.37	€19.02	€20.59	€49.49	€62.66	€19.02		€35.19	€509.30
ICT & Internet Infrastructure	€2.99					€61.39	€260.68			€163.13	€488.19
Business Services	€357.85	€5.17	€44.62			€5.17	€4.70			€11.38	€428.88
Design, Development & Testing	€63.04	€17.82	€17.97		€7.19		€121.85	€55.40	€29.41	€23.28	€335.95
Headquarters	**€53.15**	**€16.62**	**€28.37**			**€95.98**	**€92.68**	**€19.46**			**€306.27**
Education & Training	€21.85				€2.70					€15.57	€40.12
Maintenance & Servicing	€15.19			€8.13						€5.09	€28.41
Shared Services Centre	€23.51						€1.35				€24.85
Recycling									€9.96	€10.48	€20.44
Customer Contact Centre		€3.44	€1.50		€1.12			€4.64			€10.71
Technical Support Centre		€4.79									€4.79
Grand Total	**€9,633.69**	**€3,708.52**	**€2,082.23**	**€1,416.21**	**€1,407.65**	**€976.54**	**€857.00**	**€326.42**	**€265.39**	**€1,512.52**	**€22,186.16**

(Source: fDiMarkets.com – Cross border investment monitor)

“Manufacturing” was not only the sector in which foreign companies invested more in terms of number of new FDI projects, but also in terms of total invested value, as shown in table 2. In fact in the period 2003-2011 “manufacturing” attracted projects for a total of €7.5 billion, about 34% of the total. “Electricity” and “logistics, distribution and transportation”, with €5.5 billion and €4.7 billion respectively (24% and 20% of the total), reached the second and third position in terms of total investment.

Investment in new FDI projects in headquarters in the period 2003-2011 only amounted to €306 million, about 1.3% of the total.

In terms of new jobs generated by FDI projects in the period 2003-2011, table 3 shows that once again “manufacturing” was the leading business activity, with 23,849 new jobs generated over the 9-years period (or 42% of the total). “Logistics, distribution and transportation” reached the second position, with 12,515 new jobs created, or 22% of the total, followed by “retail and construction” (11% and 6.7% of the total respectively).

Table 3: Total new jobs generated by new projects in Flanders by arrondissement and business unit (2003-2011, million €)

Business activity	Antwerp	Hasselt	Gent	Turnhout	Halle-Vilvoorde	Mechelen	Brugge	Leuven	Maaseik	Other	Grand Total
Manufacturing	2,591	10,882	6,409	1,295	82	713	136	258	400	1,083	**23,849**
Logistics, Distribution & Transportation	6,434	690	452	1,002	278	1,067	385	175	147	1,885	**12,515**
Retail	3,955	350	514		248		463	211		511	**6,252**
Construction	880	2,060	880								**3,820**
Design, Development & Testing	371	99	200	36	400			146	358	119	**1,729**
Research & Development	3	41	114	718	670	12		37		110	**1,705**
Electricity	742	135		52			452		50	147	**1,578**
Sales, Marketing & Support	466	7	300	80	147	216	47	113		148	**1,524**
Headquarters	382	83	161		360	301		81			**1,368**
Business Services	895	19	46		15	19				42	**1,036**
ICT & Internet Infrastructure	1				258	55				123	**437**
Customer Contact Centre		92	40	60				110			**302**
Shared Services Centre	196				10						**206**
Maintenance & Servicing	61						90			22	**173**
Education & Training	25			66						74	**165**
Technical Support Centre		132									**132**
Recycling										70	**70**
Total	**17,002**	**14,590**	**9,116**	**3,309**	**2,468**	**2,383**	**1,573**	**1,131**	**955**	**4,334**	**56,861**

(Source: fDiMarkets.com – Cross border investment monitor)

Investment in headquarters generated 1,368 new jobs in the period 2003-2011, or 2.4% of the total number of jobs created by FDI projects in the period 2003-2011. Differently from other business activities, FDI projects in headquarters were very much focused on some specific arrondissements, as illustrated in the next section.

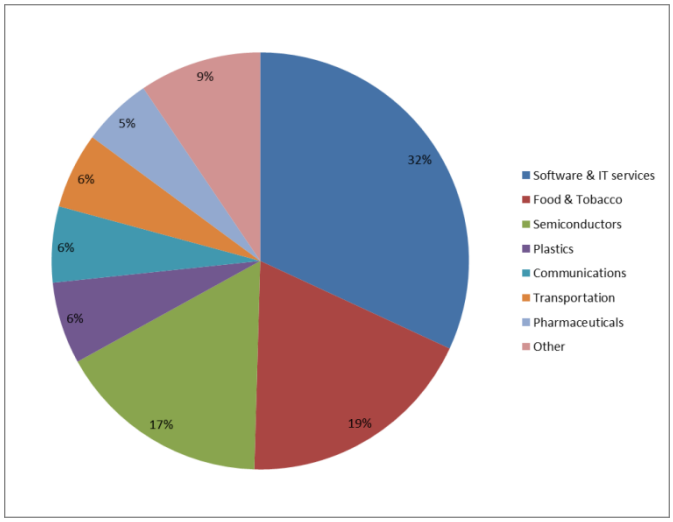
5.2. FDI IN HEADQUARTERS: WHICH INVESTORS, SECTORS AND REGIONS IN FLANDERS?

In the period 2003-2011 Flanders attracted a total of 22 new headquarters projects, reaching the 22nd position among all European regions.

Despite the limited number of projects executed in the period 2003-2011, headquarters is the 5th largest business activity by number of FDI projects in the period 2003-2011 in Flanders, as shown in table 1 in the previous section.

FDI in headquarters was mostly focussed on a small number of sectors in the period 2003-2011, as shown in Figure 12: “software and IT services” (32% of the total FDI in headquarters),” food and tobacco” (19% of the total) and “semiconductors” (17% of the total).

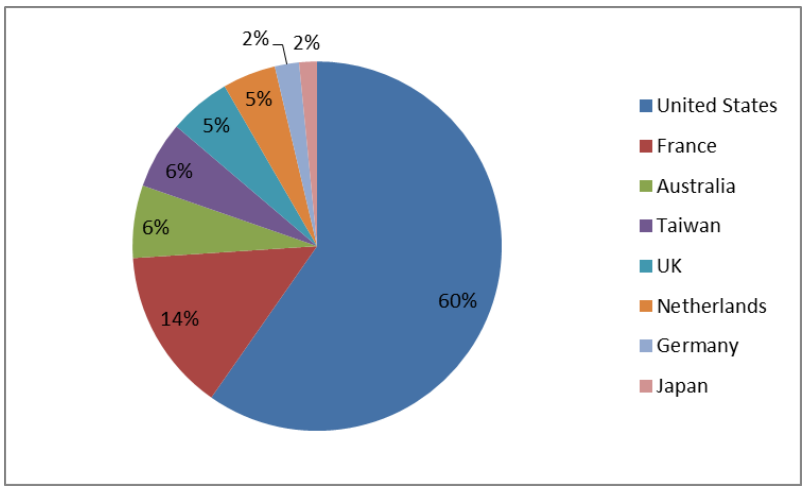
Figure 12: Investment in FDI projects in headquarters in Flanders by sector (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

The largest investors in headquarters projects in the period 2003-2011 were US MNEs as shown in Figure 13: 60% of the total investment in headquarter projects in 2003-2011 came from American companies. The second largest investors in this nine-years period was France, with 14% of the total value of investments in headquarters, followed by Australia and Taiwan (6% each).

Figure 13: Number of FDI projects in Flanders in headquarters by country of origin (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

Table 4 and Figure 14 provide an overview of the arrondissements that attracted the 22 headquarters projects in the period 2003-2011.

Table 4: New headquarters projects in Flanders per year by arrondissement (2003-2011)

Arrondissement	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Antwerp		1			2		2	1		**6**
Mechelen	2	1	1		1			1		**6**
Halle-Vilvoorde		3	1			1				**5**
Gent			1					1		**2**
Leuven					1	1				**2**
Hasselt						1				**1**
Total	**2**	**5**	**3**	**0**	**4**	**3**	**2**	**3**	**0**	**22**

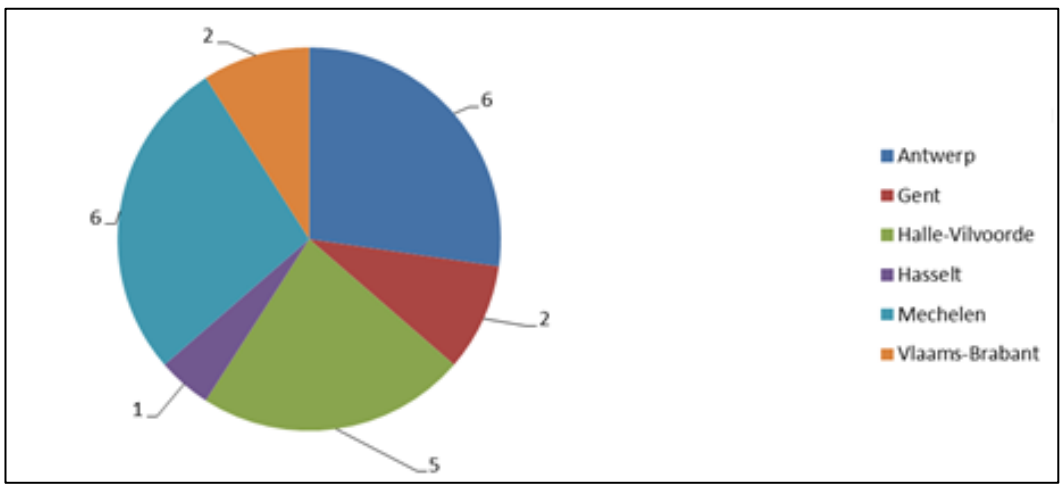
(Source: fDiMarkets.com – Cross border investment monitor)

Data show that Antwerp and Mechelen were the arrondissements that attracted the largest number of new headquarters projects in the period 2003-2011, with a total of 6 new projects respectively. Halle-Vilvoorde followed in third position, with 5 new projects in the 9-years period.

Investments in headquarters fluctuated over time. After a slump in 2006, investment in headquarters picked up again with 4 new projects in Flanders. This increase can be explained by the introduction of the notional interest deduction in 2007.

Moreover, it is worth noting that no new headquarter was attracted in Flanders in the course of 2011. This is in line with the decreases at global and European level and is primarily related to the general contraction of the world economy.

Figure 14: Total number of new headquarter projects in Flanders by arrondissement (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

In terms of value of new investment, with more than 31% of the total Mechelen is the arrondissement that attracted the largest share of FDI in headquarters (31% of the total), as shown in table 5, followed by Halle-Vilvoorde (30%) and Antwerp (about 17% of the total).

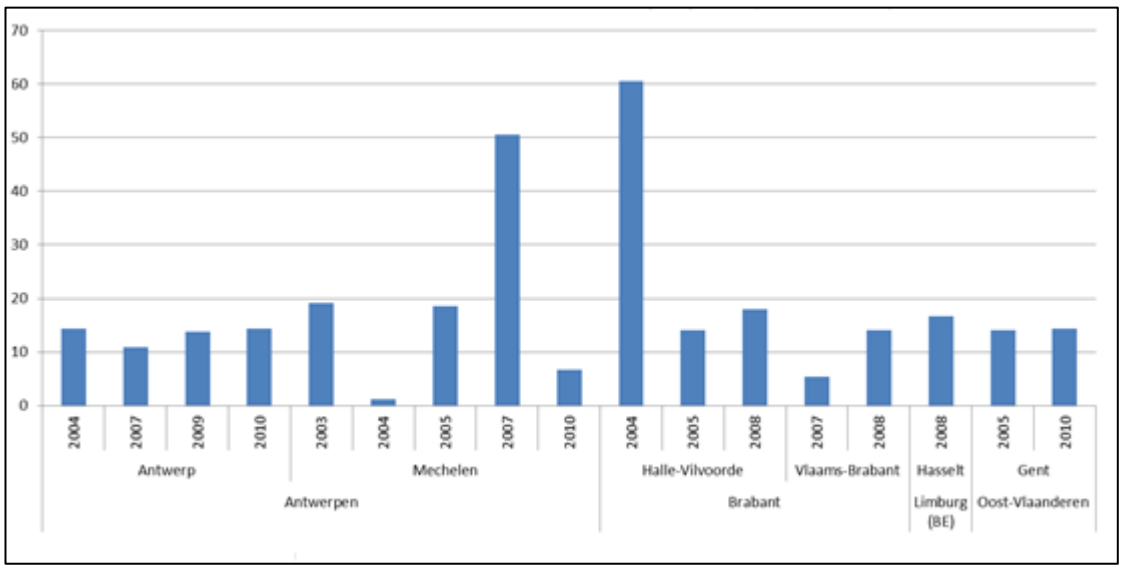
Table 5: Investment in headquarters by arrondissement as a percentage of total investment in headquarters in Flanders (2003-2011)

Arrondissment	% of investment in RHQ projects
Mechelen	31%
Halle-Vilvoorde	30%
Antwerp	17%
Gent	9%
Leuven	6%
Hasselt	5%
Total	100%

(Source: fDiMarkets.com – Cross border investment monitor)

A large part of the investment was concentrated in specific years and specific projects (cfr. Figure 15).

Figure 15: Investment in headquarters by region and arrondissement (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

The peak investment in headquarters in Mechelen in 2007 was due to a € 50 million investment in a new headquarters by Intelleflex, a US company active in the semiconductors business.

The 2004 peak in the Halle-Vilvoorde arrondissement was due to a €36 million investment in a new headquarters project by Atos (part of Atos Origin, a company active in the software and IT services sector) in Zaventem.

One of the main benefits for a region generated by the attraction of headquarters is the creation of new jobs. In terms of jobs created by FDI projects in headquarters, Antwerp was the best performer, with 382 new jobs created over the period 2003-2011, or 28% of the total as shown in table 6. Halle-Vilvoorde followed, with 360 new jobs in the 9-years period.

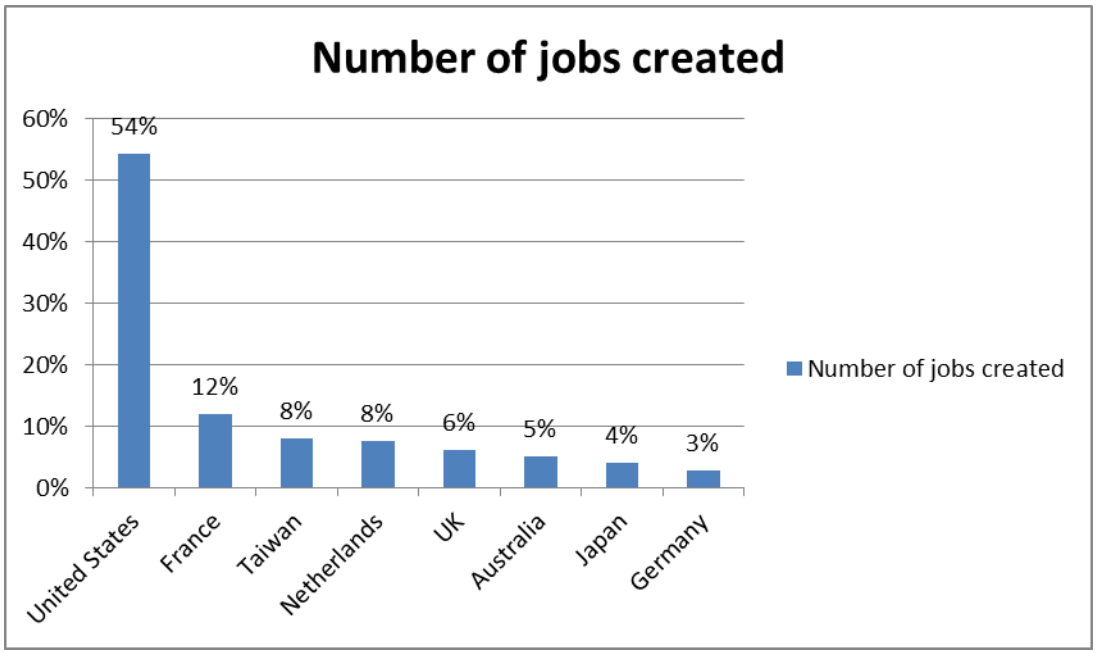
Table 6: New jobs created in headquarters by arrondissement as a percentage of total new jobs in headquarters in Flanders (2003-2011)

Arrondissment	% of Jobs Created
Antwerp	28%
Halle-Vilvoorde	26%
Mechelen	22%
Gent	12%
Hasselt	6%
Leuven	6%
Total	100%

(Source: fDiMarkets.com – Cross border investment monitor)

In terms of source countries, US investment projects in headquarters were the ones that generated the largest number of jobs in the period 2003-2011 in Flanders. They generated more than half of the total number of new jobs in the nine-years period, as shown in Figure 16.

Figure 16: Percentage of jobs created by headquarters projects (2003-2011)

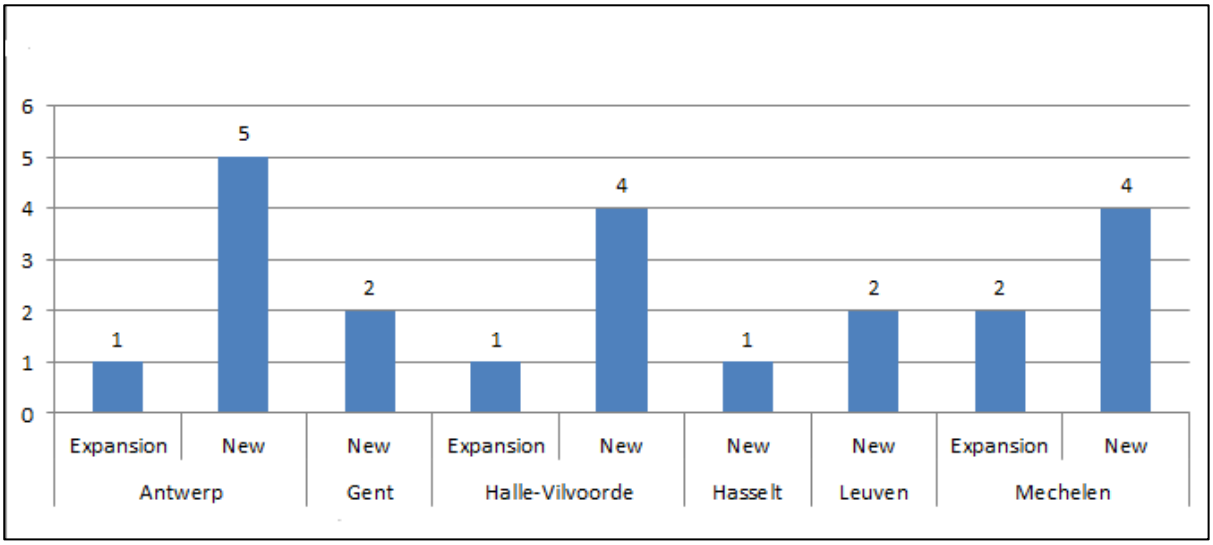


(Source: fDiMarkets.com – Cross border investment monitor)

The US was followed at a distance by France (12% of the total), Taiwan and The Netherlands (8% of the total each), UK (6%), Australia (5%), Japan (4%) and Germany (3%).

In the period 2003-2011, 89% of the FDI projects in headquarters consisted in the establishment of new headquarters, while 11% constituted expansion of existing headquarters. No project can be considered a co-location. Figure 17 shows the headquarters projects by type in the different arrondissements in Flanders in the period 2003-2011.

Figure 17: Total number of headquarter projects in Flanders by type and by arrondissement (2003-2011)



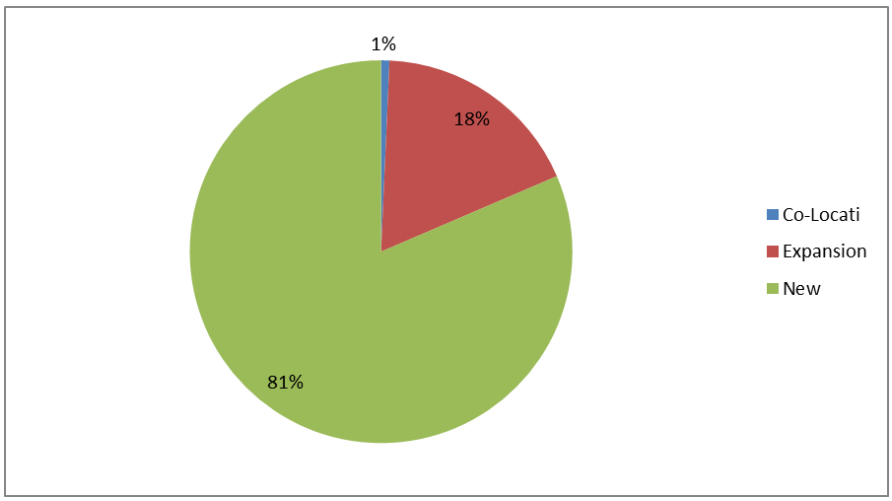
(Source: fDiMarkets.com – Cross border investment monitor)

6. EUROPEAN TRENDS IN THE ATTRACTION OF HEADQUARTERS: HOW IS FLANDERS PERFORMING VIS-À-VIS OTHER EU COUNTRIES?

In the period 2003-2011 multinational firms announced and executed 4,920 FDI projects in headquarters across the globe. A total of 1,704 projects, about 35% of the total, were done in one of the 27 EU* countries. This section analyses the most important trends in the location of headquarters in Europe, and assesses the position of Flanders vis-à-vis the top performing regions in Europe.

Data for the analysis were retrieved from the fDi database of the FT and contains data on a total of 1,704 new *headquarter* projects in 77 regions (NUTS 1 level, see Annex 1) in Europe (EU-27) over the period 2003-2011.

Figure 18: FDI projects in EU-27 countries in all sectors and business activity by project type (2003-2011)

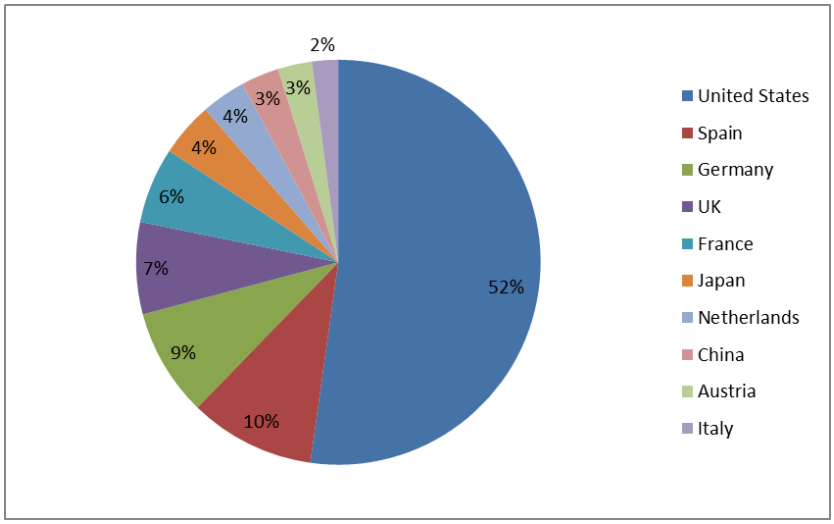


(Source: fDiMarkets.com – Cross border investment monitor)

Figure 18 shows that the preferred mode of entry for foreign investors to establish new headquarters in the 77 EU-27 regions analysed in the period 2003-2011 was greenfield investment (about 81% of the total). About 18% of the investment were expansions of existing headquarters, while only 1% constituted co-location projects.

* The 27 EU member states are: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

Figure 19: FDI in EU-27 in headquarters by country of origin (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

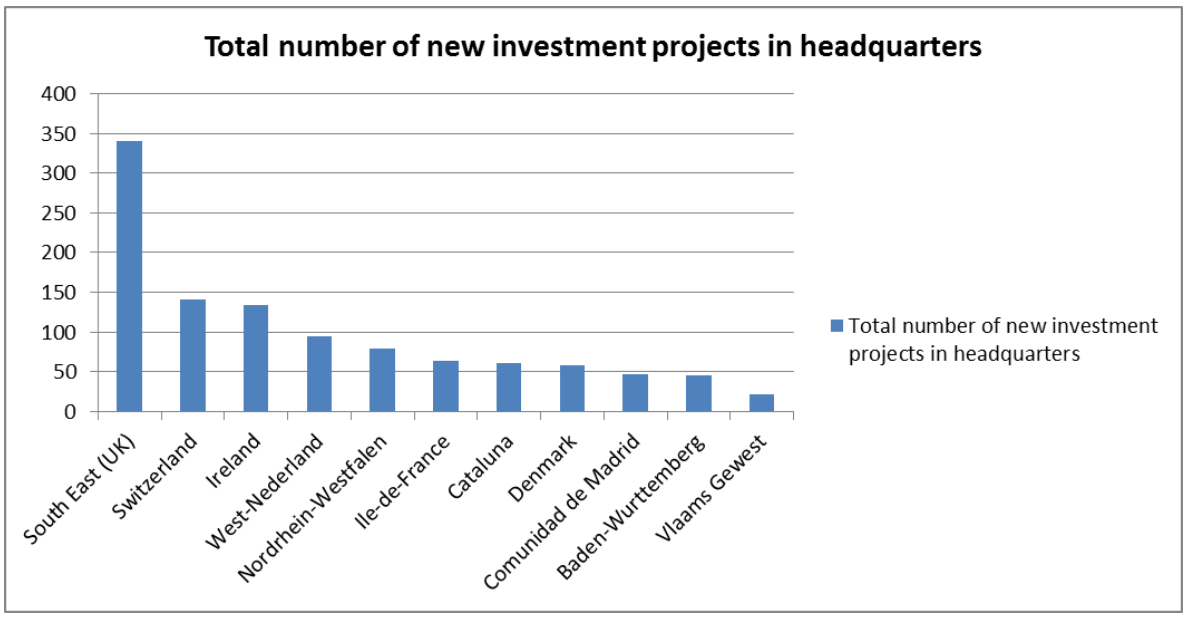
Figure 19 shows the breakdown by source country of the investment made in headquarters in the EU-27 in the period 2003-2011. US multinationals were the largest investor, covering about 52% of the total amount invested in headquarters projects in the nine-years period. The second, third and fourth largest investors – Spain, Germany and UK – follow at some distance, with 10%, 9% and 7% of the total respectively.

6.1. TOP REGIONS AND CITIES: HOW IS FLANDERS POSITIONED IN EUROPE FOR HEADQUARTERS ATTRACTION?

As shown in Figure 20, South East UK was the European region that attracted the largest number of new investment projects in headquarters over the period 2003-2011, with a total of 341 new projects. The second region in terms of attraction of new projects at European level was Switzerland, with a total of 141 new projects, followed by Ireland, with 134 new projects. South West UK, Switzerland and clearly stand out, with a number of projects much higher than the rest of the top ten: the three regions alone attracted 58% of the total number of new projects in the top ten over the period 2003-2011[*].

[*] The unit of analysis used in the paper is the NUTS 1 region. According to this classification some countries (i.e. Ireland or Sweden) are considered NUTS 1 regions.

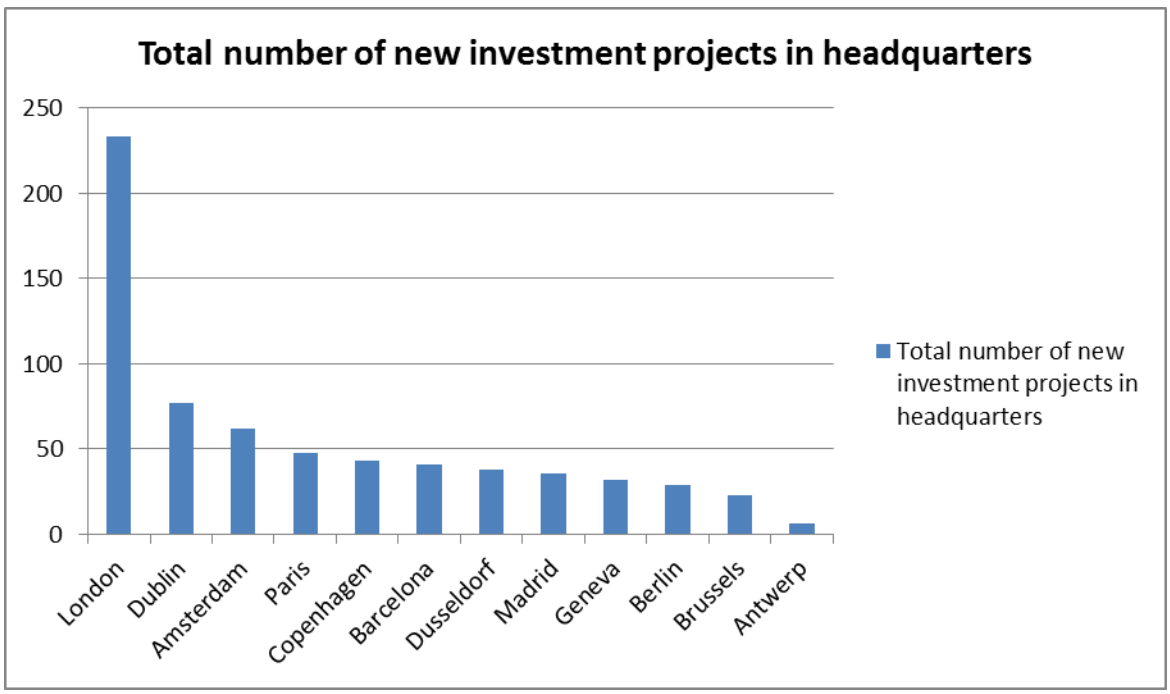
Figure 20: Top 10 European regions (and Flanders) by total number of new investment projects in headquarters (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

Cities attract the largest amount of investment in headquarter. The South East region of the UK includes the city of London, which alone attracted 233 of the 341 projects over the period 2003-2010 (68% of the total) as shown in Figure 21. Similarly, Geneva and Zurich attracted respectively 22% and 17 % of the total headquarter projects in Switzerland, Dublin attracted 57% of the projects in Ireland and Amsterdam was the target destination for 65% of the total FDI in headquarters in West-Nederland. This points to the fact that – similarly to what happens in other regions of the world – FDI in headquarters is mainly directed towards large cities.

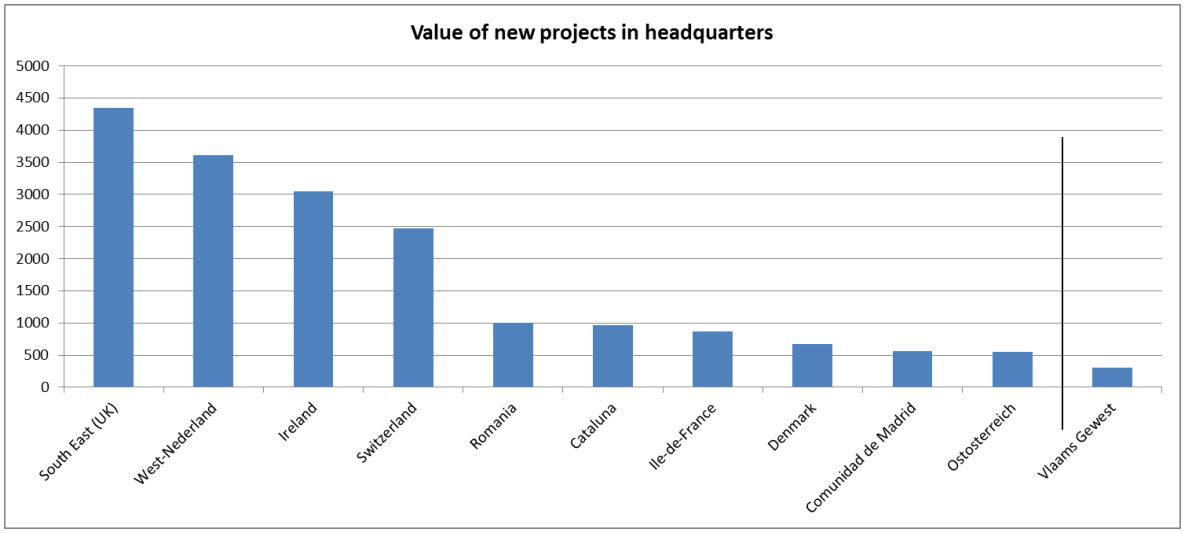
Figure 21: Top 10 European cities (plus Brussels and Antwerp) by total number of new investment projects in headquarters (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

Figure 22 shows the value new headquarter projects in the top 10 regions (and Flanders) in the period 2003-2011.

Figure 22: Top 10 EU-27 recipient regions by total value of new investments in headquarter projects (million €, 2003-2011)



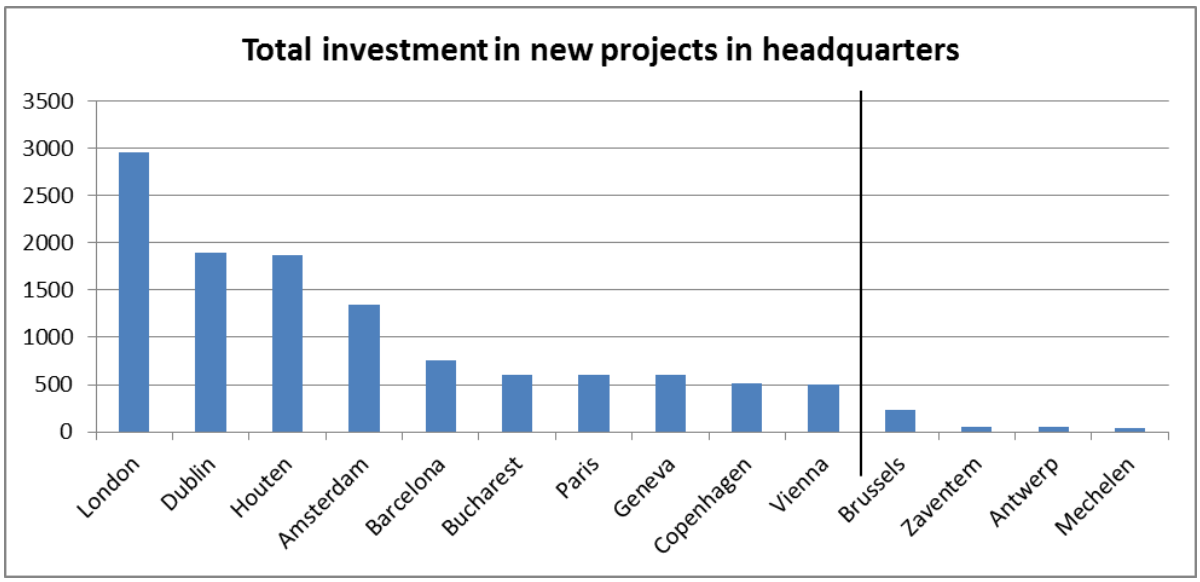
(Source: fDiMarkets.com – Cross border investment monitor)

In terms of total value of investment made by multinationals in new headquarters, South East UK, West Nederland and Ireland were the top three recipients in the period 2003-2011, (cf. Figure 22). South East UK attracted investment in headquarter for a total of €4.3 billion, West Nederland a total of €3.6 billion and Ireland about €3 billion. These three regions alone attracted 60% of the total investment in new headquarters projects made in the top 10 recipient European regions over the period 2003-2011. Interestingly, Romania reaches the 5th position in terms of total value of investments attracted in new headquarters' projects over the period 2003-2011, with a total of about € 1 billion (while in terms of number of projects it reached only the 16th position, with a total of 31 new investment projects over the nine years period). Romania is therefore attracting a smaller number of projects higher in value, especially in ICT.

With a total value of about €306 million, Flanders reached the 24th position in terms of total value of investment in new headquarter projects over the period 2003-2011.

Figure 23 shows the total value invested in new headquarters in the top 10 cities (and top Flemish cities) in the period 2003-2011.

Figure 23: Top 10 EU-27 recipient cities (and top Flemish cities) by total value of new investments in headquarters projects (million €, 2003-2011)



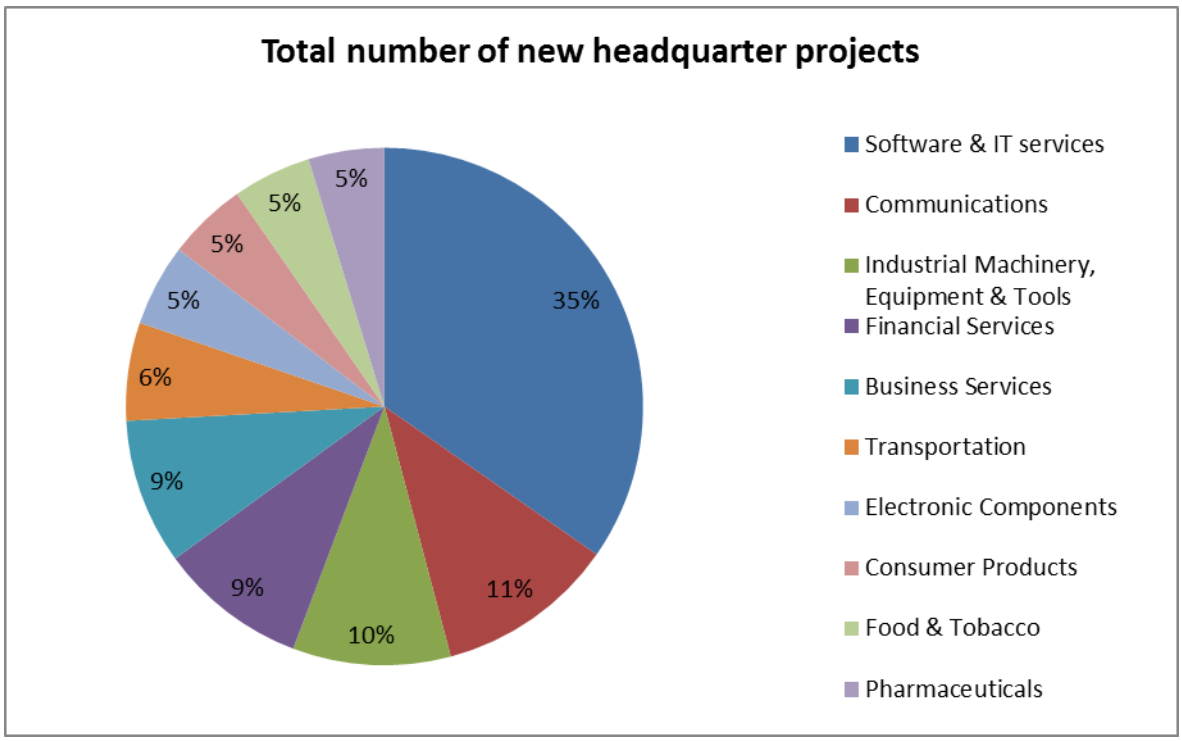
(Source: fDiMarkets.com – Cross border investment monitor)

In terms of total value of investment made by multinationals in new headquarters, London, Dublin and Houten (a city in the province of Utrecht, close to Amsterdam) were the top recipients in the period 2003-2011 (cfr. Figure 23). London attracted investment in headquarters for a total of €2.9 billion, Dublin €1.9 billion Houten-Amsterdam a total of €3.2 billion. These cities alone attracted 68% of the total investment in new headquarters projects made in the top 10 recipient European cities over the period 2003-2011. London clearly stands out as the city that attracted the largest amount of investment and number of projects at European level. UK Trade and Investment argues that the main reasons for the attractiveness of this city are the ease of doing business and the availability of business banking services.

6.2. TRENDS AT THE SECTOR LEVEL

Figure 24 shows that “software and IT services” is the sector with most of the new headquarters projects in the period 2003-2011, representing 35% of the total new headquarter projects. “Communication”, “industrial machinery, equipment and tools”, and “financial services” follow with 11%, 10% and 9% of the total, respectively. “Business services” account for 9% of the total new projects.

Figure 24: Sectoral distribution of the total number of new investment projects in headquarters (2003-2011)

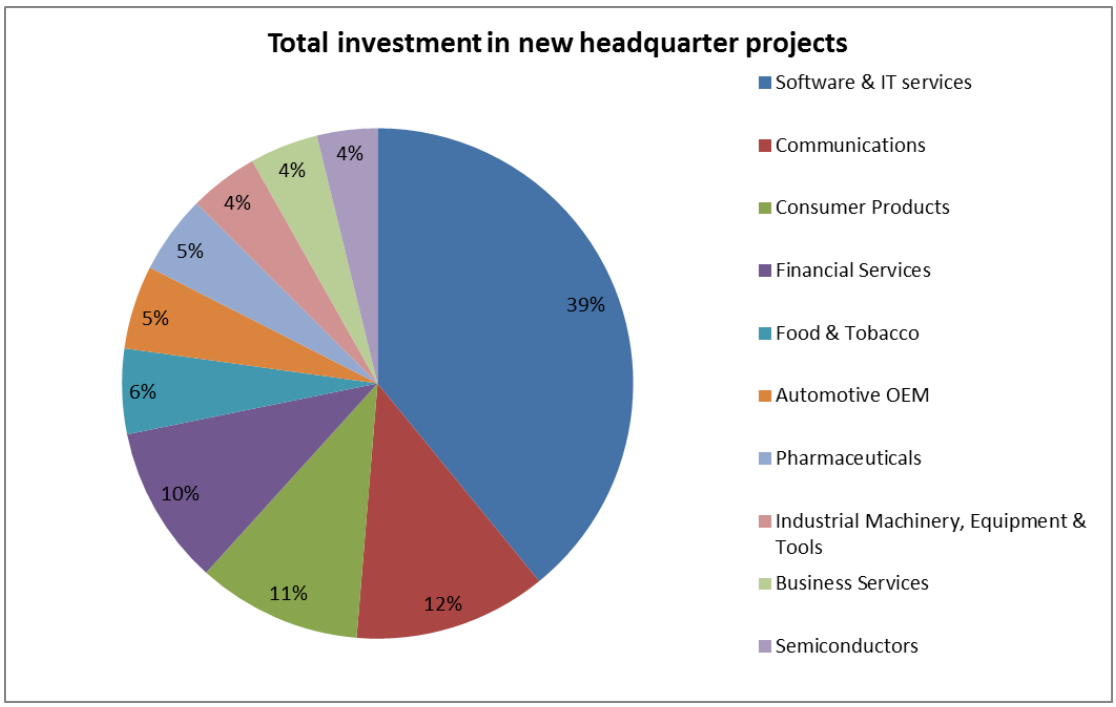


(Source: fDiMarkets.com – Cross border investment monitor)

Figures on the total value of new investment projects by sector show a slightly different picture. As shown in Figure 25, 39% of the total new investment in headquarters established in EU 27 and Switzerland over the period 2003-2011 was directed towards “software and IT services”, which was by far the largest sector in terms of total investment. “Communications” ranked second, with 12% of the total value of new investment projects in headquarters. “Consumer products” ranked third with 11% of the total value. In terms of number of new projects, “consumer products” accounted for only 5% of the total new headquarters projects announced in the period 2003-2011. However, in terms of value it accounted for about 11% of the total investment made in new headquarters projects in Europe.

The largest investments in value made in headquarters in the past nine years were also made by companies belonging to the “software and IT services sector”, followed by “communications”, “consumer products”, “financial services”, and “food and tobacco”. Regions that have been able to develop a strategy to attract the headquarters of companies in these sectors have also been able to attract more regional headquarters to their territory.

Figure 25: Sectoral distribution of the total value of new investment in headquarters in the EU-27 (2003-2011)



(Source: fDiMarkets.com – Cross border investment monitor)

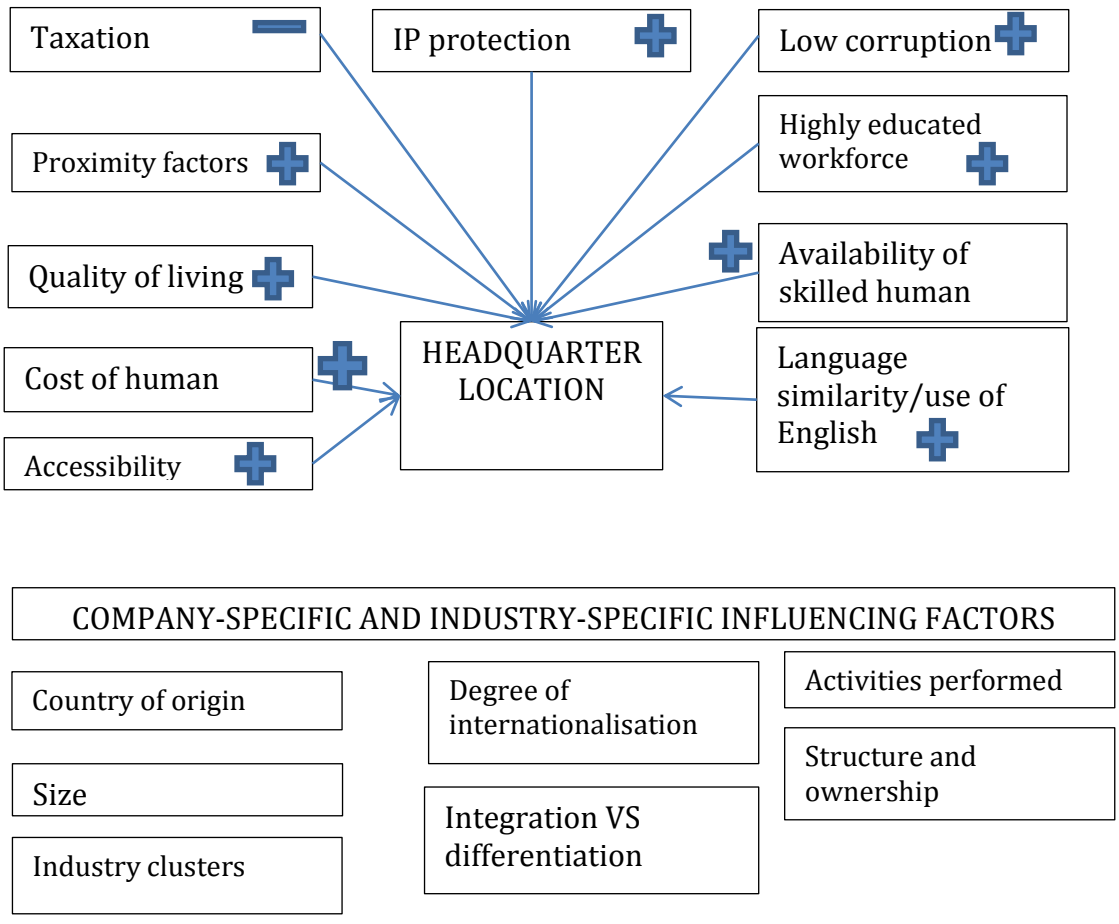
7. THE LOCATION ATTRACTIVENESS OF FLANDERS

In chapter 3 of this report we developed a conceptual framework to identify the most important drivers for the location of headquarters (see fig. 26).

In this section we will try to identify the most attractive area to locate a headquarter by looking at different location drivers. In particular we aim at testing the model developed in section 3 over a subset of destinations for headquarters which can be considered as competitors for Flanders in the attraction of FDI in this business function. Unfortunately, no data on the regional level are available, which forced us to perform the analysis at country level and take Belgium as unit of analysis. We come back to this point in the interpretation of the results.

In particular we will look at the performance of the different drivers in the UK, The Netherlands, Ireland, France, Spain, Switzerland and Belgium.

Figure 26: Conceptual model (elaboration from Baaij et al 2004).



The model is built around 10 location drivers, which we discussed in section 3*. The drivers are put in a matrix in order to make a pair wise comparison (table 7). The number in the cell corresponds to the factor considered to be relatively more important in the pairwise comparison

For example factor 8, infrastructure, is more important than factor 1, 2, 3, 6 and 7 (taxation, IP protection, low corruption, cost of human capital and language similarity) and less important than factor 4 and 5 (quality of workforce and availability of workforce).

The relative importance of each of the drivers is based on a meta-analysis and a systematic review of the literature (see chapter 2 and 3).

Table 7: Pairwise comparison of location drivers

		1	2	3	4	5	6	7	**8**	9	10
		Taxation	**IP protection**	**Low corruption**	**Quality of workforce**	**Availability workforce**	**Cost of human capital**	**Language similarity/use of English**	**Infrastructure**	**Quality of life**	**Proximity**
1	**Taxation**		1	1	4	5	1	7	**8**	9	10
2	**IP protection**	1		2	4	5	6	7	**8**	9	2
3	**Low corruption**	1	2		4	5	3	7	**8**	9	10
4	**Quality of workforce**	4	4	4		4	4	4	4	4	4
5	**Availability workforce**	5	5	5	4		5	7	5	5	5
6	**Cost of human capital**	1	6	3	4	5		7	**8**	9	10
7	**Language similarity/use of English**	7	7	7	4	7	7		**8**	9	7
8	**Infrastructure**	**8**	**8**	**8**	4	5	**8**	**8**		8	8
9	**Quality of life**	9	9	9	4	5	9	9	8		9
10	**Proximity**	10	2	10	4	5	10	7	8	9	

Table 8 shows the frequency distribution of the ten drivers (ie, the number of times a certain driver is mentioned to be more important than another driver) and assigns a weight to each of them. These weights determine the importance of each driver in the model. The weights correspond to the relative frequency of each factor.

* Company-specific drivers are not included in this model.

Table 8: Frequency distributions

		Frequency	Frequecy distribution
1	**Taxation**	3	0.067
2	**IP protection**	2	0.044
3	**Low corruption**	1	0.022
4	**Quality of workforce**	9	0.200
5	**Availability workforce**	7	0.156
6	**Cost of human capital**	1	0.022
7	**Language similarity/use of English**	6	0.133
8	**Infrastructure**	7	0.156
9	**Quality of life**	6	0.133
10	**Proximity**	3	0.067
	Total	45	1

To make a comparison between the different countries, an attractiveness factor is calculated for each driver of each country. Table 9 reports the measures used as proxies of the different factors.

Table 9: Construction of the attractiveness factor: data and data sources per driver

Factor	Measure	Data source	Year(s)
Taxation	Total tax rate (% of commercial profits)	World bank	2007-2011
IP protection	IPR-index of GCR	World Economic Forum, Executive Opinion Survey	2002-2010
Low corruption	CPI (corruption perception index)	Transparency international http://cpi.transparency.org/cpi2011/results/	2011
Quality of workforce	Persons aged 25-64 with upper secondary education attainment (%) (from 2008)	EUROSTAT	Average 2008-2011
Availability of workforce	Unemployment rate of highly educated people (tertiary education, levels 5-6)	EUROSTAT	2002-2011
Cost of human capital	Average hourly labour cost	EUROSTAT	2004-2011
Language similarity/use of English	% English speakers for total population	European and their languages (2006) (for Switzerland: study of the University of	2005
Infrastructure	Infrastructure/tot area	CIA	2011
Quality of life	HDI	HDI report	2011
Proximity	Distances from other important business cities + closeness to financial markets	Own calculations	//

Each factor's percentage, index or ranking is then normalized with the following formulas:

$$\text{Descending: Normalised factor} = \frac{(\text{Factor} - \text{Minimum})}{(\text{Maximum} - \text{Minimum})} * 10$$

$$\text{Ascending: Normalised factor} = 1 - \frac{(\text{Factor} - \text{Minimum})}{(\text{Maximum} - \text{Minimum})} * 10$$

The scores of each country are reported in table 10*.

Table 10: Scores for the attractiveness factors per country after normalisation

Dymension/Country	Belgium/Flanders	France	Spain	Ireland	Switzerland	Netherlands	United Kingdom
Taxation	2.08	0.00	2.76	10.00	9.18	6.43	7.47
IP protection	4.44	7.22	0.00	7.78	10.00	6.67	7.78
Low corruption	4.81	2.96	0.00	4.81	9.63	10.00	5.93
Quality of workforce	4.99	6.77	0.00	4.59	10.00	6.32	6.38
Availability of workforce	1.10	2.70	10.00	5.00	0.00	0.10	1.70
Cost of human capital	8.19	9.70	10.00	0.00	0.62	8.42	9.10
Language similarity/use of English	4.38	1.23	0.00	10.00	3.29	8.22	10.00
Infrastructure	7.66	0.61	0.05	0.00	10.00	2.53	2.17
Quality of life	0.64	4.47	3.19	9.57	8.51	10.00	0.00
Proximity	9.51	8.24	0.00	7.22	7.61	10.00	2.52

Finally, the weights are multiplied with the attractiveness factors and summed up for each country. Table 11 shows the final score per each country.

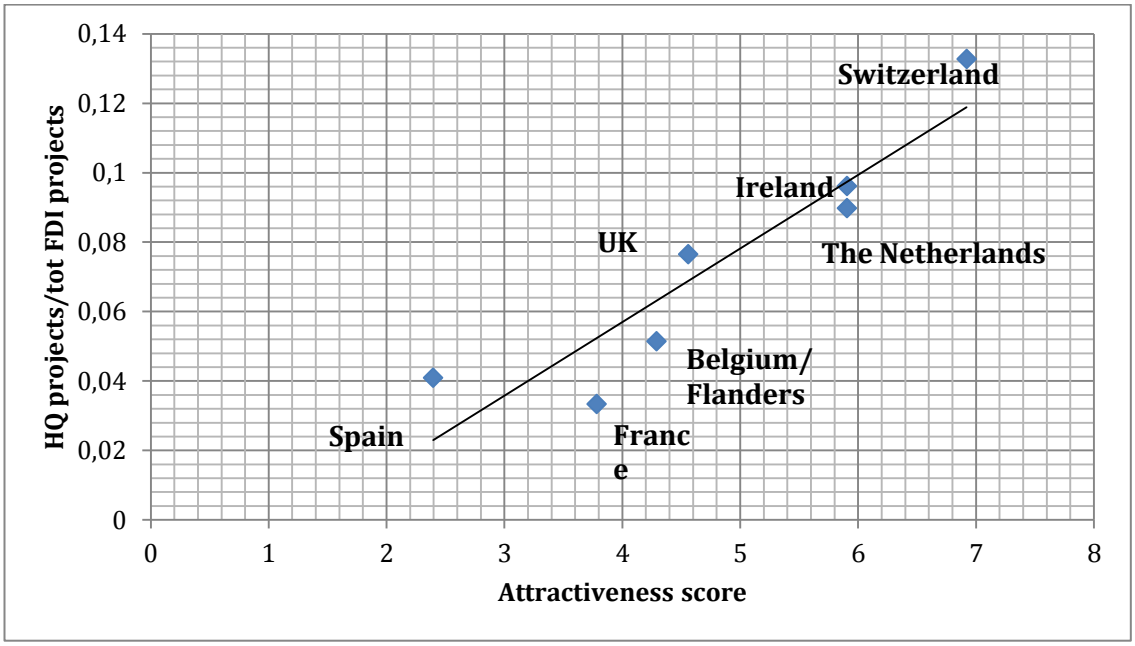
Table 11: Final country scores

Country	Score
Switzerland	6.920
Ireland	5.905
Netherlands	5.904
United Kingdom	4.558
Belgium / Flanders	**4.290**
France	3.781
Spain	2.395

The model explains very well the score obtained by each country. The scatter plot in Figure 27 shows the correlation among the attractiveness score of each country and the share of FDI projects in headquarters on the total FDI projects in each country.

* Please note that the normalization factors should not be interpreted as independent numbers, but taken as **relative scores** between the seven countries.

Figure 27: Attractiveness score VS share of HQ projects on FDI projects



Countries with a higher attractiveness score attract relatively more projects in headquarters compared to FDI projects in other business activities.

7.1. ANALYSIS OF THE RESULTS

Switzerland is the most attractive country among the seven analysed. It has a total score of 6.920 and top scores in terms of IP protection, quality of the workforce and infrastructure.

Switzerland has been attracting a large amount of FDI from the top investor, the US. Switzerland has been one of the preferred locations for United States direct investment (USDI) in Europe (Müller (2009). Several of the largest US companies have established their European headquarters in Switzerland over the past years. “Being less integrated in the European Union may have weakened its competitiveness compared with other European countries” (Müller 2009). However, a survey of Arthur D.L. (2009) revealed that the status of not being a EU member is perceived a disadvantage to only 12% of the interviewed companies while for 64% of the interviewed companies it does not matter.

It is important to notice that not all the Swiss cantons are active in attracting headquarters. A recent report by Arthur D Little (2009) mentions that despite the general competition among cantons for the attraction of international companies to their administration area, only a few cantons on the attraction of headquarters. In particular, Zug appears to be the most active canton in attracting new headquarters followed by Vaud, Geneva, Zurich and Fribourg. About 60% of all headquarters are located in these five cantons.

The study of Müller also reports on the sectorial spread of USDI in Switzerland. In the past years there has been a remarkable increase of headquarters of firms in the IT sector.

A recent study by Arthur D. Little (2009) reports on the most important reasons why many company choose to locate their headquarters in Switzerland. First of all Switzerland has a competitive taxation scheme for corporations and people. This is supported by studies of KPMG Switzerland (2008) and Deloitte Switzerland (2009), which highlight that the effective tax burden in as low as 5%, and that an even lower tax level is possible through tax base erosion. Moreover dividend income and capital gains on disposals of qualifying investments are tax free in Switzerland and shareholder contributions are not subject to Swiss withholding tax at the time of the repatriation. However, a recent survey among MNEs located in Switzerland revealed that companies are increasingly worried about the spotlight that has recently been thrown on Switzerland's fiscal regime (Deloitte 2010). In particular the inclusion of Switzerland on the OECD's "grey list" and the handing over of account holders' names to the American tax authorities have been threatening to undermine the nation's competitive fiscal regime.

On top of a very competitive tax regime, Switzerland can count on being one of the world's most competitive and stable economies. In the past years Switzerland has retained its 1st position in the World Competitiveness report's ranking, especially thanks to its high capacity to innovate, its very sophisticated business culture, its highly efficient labour market and the stable macro-economic environment. Moreover, as shown in table 10, Switzerland has a very high score in terms of low corruption and IP protection, showing the high quality level of its institutions.

Switzerland has a highly qualified labour force, as shown once again by the high scores in table 10. According to Arthur D. Little, Switzerland has the most skilled workforce worldwide. Employees are highly motivated and maintain a strong relationship with their employers (Arthur D. Little 2009). However, companies deciding to locate in Switzerland have to take into account the high cost of living in the country, which translates into high salaries and therefore high costs for human capital. Switzerland is a multi-lingual country, where a large part of the workforce speaks at least two of the official Swiss languages (French, German and Italian).

The high score on infrastructure can be attributed to Switzerland's central location and excellent infrastructure: the Swiss rail network and the airports are highly efficient and provide connections to all major European cities.

In terms of quality of life, Switzerland can rely on top class health care and education systems (World Competitiveness report 2011). Not only the primary and secondary schools offer a very high level of teaching, but also the tertiary education: the Swiss management schools and universities are very highly ranked at world level. The Swiss health care system is among the best in the world due to the universal health insurance coverage, a relatively low patient per doctor ratio and high federal healthcare expenditures (3,5% above the OECD average).

Although Switzerland has surely many location advantages, it also has some disadvantages, especially in terms of cost of human capital: as the unemployment rate is very low in Switzerland (3,5% in 2010) compared to other European countries, it might be hard to find good and sufficient labour force.

Switzerland also scores relatively bad on proximity to important business cities and other financial cities (see table 10).

The high scores of UK and Ireland are not surprising. They can be attributed to the favourable tax regime and low fiscal pressure. Recently UK has lowered its taxation even more, increasing its attractiveness for foreign investors. Ireland can count on a favourable fiscal regime, a liberal institutional framework and a high-quality human capital.

The model also highlights the rising position of The Netherlands for FDI in headquarters, which was also recently recognised in the Ernst and Young study on Belgian attractiveness (Ernst and Young 2012). The main points of strengths of The Netherlands are the stable living and social environment and the telecommunications, transport and logistics infrastructure. Political stability and the clear regulatory environment are also seen as major strengths by international investors. Similarly to Belgium, the quality of education in The Netherlands is perceived as high.

Belgium and The Netherlands have very different tax systems, both having strengths and weaknesses. Compared to Belgium, The Netherlands has a better tax regime for investment in innovation. While Belgium still has a rather narrow preferential regime for profits arising from patents, known as a Patent Box, The Netherlands has been developing much broader initiatives such as to sustain R&D, such as "Innovation Box," the "RDA" (Research and Development Deduction) and the “WBSO” (Law Promotion Research and Development) (see table 12).

Table 12: Netherlands versus Belgium

	Belgium	The Netherlands
Labour cost per hour	> 39 €	20% cheaper, 31.1€
Corporate taxation	33.99%	25%
	Notional interest with limitations	More favourable formulas via ruling
	Patent box (too narrow)	Innovation box (much broader)
Exemption holding	95%	100%
Thin cap	5/1	3/1 and abuse rules
Fiscal consolidation	No	Yes
Tax freedom day*	5th August	18th June

(source: Ernst & Young 2012)

* Tax Freedom Day is the first day of the year in which a nation as a whole has theoretically earned enough income to fund its annual tax burden. It is annually calculated in the United States by the Tax Foundation—a Washington, D.C.-based tax research organization. Every dollar that is officially considered income by the government is counted, and every payment to the government that is officially considered a tax is counted. Taxes at all levels of government—local, state and federal—are included.

However, Belgium has a more favourable condition than The Netherlands for thin capitalisation[*]. The thin capitalization rule in Belgium allows a 5/1 debt/equity ratio to debt, while in The Netherlands this ratio is allowed to be only 3/1. Up to that ratio, the creditor is exempt or taxed at a reduced rate in respect of the interest paid on the debt.[†]. The higher thin cap exemption rules is more favourable to companies deciding to establish their headquarters operations in Belgium, as it enables companies to run their cash-pooling and intra-group financing in a more efficient way. Even if highly leveraged companies can still deduct interests.

The Netherlands have also a certain number of points where improvement could be made, such as the high cost of real estate and the inflexibility of the labour system. The Netherlands offer a small domestic market and compared to Belgium they seem to have less experience in sectors such as the chemical and pharmaceutical sectors and the automotive industry, as well as in the energy sector and the business services.

7.1.1. The performance of Belgium

As shown in table 11, among the seven countries analysed Belgium reached the fifth position. It performs relatively better than France and Spain, but does not reach the top scores of Switzerland and the Netherlands.

Belgium is a small open economy characterised by a highly skilled and multilingual labour force and sound institutions. The Global Competitiveness report 2011-2012 ranked Belgium 15th out of about 140 economies in terms of competitiveness. Moreover, EIU business environment rankings, Belgium reached the 7th position in terms of “policy toward foreign investment” and ranked first in terms of “foreign trade and exchange controls”.

Table 10 reports the relative scores for Belgium on the different dimensions.

In terms of taxation, Belgium scores very weak, reaching the sixth position among the seven countries considered. Despite the many measures that have been developed in the past years to ease the fiscal pressures on individuals and corporations, taxation is still very high in Belgium, especially in comparison to countries like Switzerland and Ireland. Also high complexity plays a role: in Belgium about 63 different taxes are levied on companies (Ernst and Young 2012). According to the World Bank “firms spend an average of 156 hours per year complying with all regulations dealing with taxation”.

The table reports the statutory[‡] tax rate ,which is an imperfect measure of tax competitiveness because it does not take into account the breadth of the tax base. This causes countries with high rates and a narrow base to appear less competitive. "Effective" tax rates resolve this issue by taking into account tax offsets, the present value of depreciations, and other deductions that narrow the base. A 2011 study by the American Enterprise Institute for Public Policy Research (AEI) effective tax rates a calculated to assess whether the extent to which effective tax rates paid by corporations are as high as the statutory tax rates.

[*] A company said to be thinly capitalised when it is highly leveraged. This means that its capital is made up of a greater proportion of debt than equity.
[†] Source: PwC Belgium
[‡] The statutory tax rate is the rate imposed by law on corporate profits. The effective average tax rate measures the average rate a firm might expect to face on an investment project over the possible distribution of profitability. The EATR informs location choices. The effective marginal tax rate measures the tax liability incurred on an additional euro of investment.

In the study, the authors calculate effective tax rates using two main measures. The first is the effective marginal tax rate (EMTR) and the effective average tax rate (EATR).

Table 13 summarises the EATR and EMTR computed for the seven countries in our analysis.

Table 13: EATR and EMTR

Country	EATR (2010)	Ranking EATR	EMTR (2010)	Ranking EMTR	Ranking statutory
Ireland	10.9	1	9.7	1	1
Switzerland	15.4	2	10.9	2	2
Netherlands	19.4	3	15.1	4	4
Belgium	22.3	4	13.9	3	6
United Kingdom	22.3	4	18.8	5	3
France	27.5	6	23.8	6	7
Spain	27.5	6	26.3	7	5

The table above shows that for effective average tax rates, the performance of Belgium improves. Belgium performs better than the UK, France and Spain. In terms of effective marginal tax rate, Belgium is performing better than the UK, France, Spain and also the Netherlands.

In terms of IP protection, Belgium has the worst score among the seven countries analysed. According to the Heritage Foundation "laws in Belgium are well codified, and the judicial system is generally respected, but the courts can be slow in practice. Similarly, intellectual property rights and contract enforcement are generally secure, though enforcement actions can be protracted".

Belgium scores well on the corruption dimension. According to the 2012 index of economic freedom in Belgium "corruption is minimal, and the government prohibits and punishes all forms of bribery". In recent years, Belgium has invested in trying to reduce red tape. According to a recent report by Ernst and Young the most important reform was the recent "Kafka Plan" reforms executed by the Government, which have enabled Belgium to reduce the number of days required to establish a business from 56 in 2004 to just 4 days (Ernst and Young 2012). Belgium's regional governments have created ambitious projects — Flanders in Action and the Walloon Marshall Plan — that offer opportunities for investment and business development.

In terms of human resources, Belgium can offer a highly skilled and multilingual workforce. According to Ernst and Young Belgium has one of the most multilingual and productive workforces in Europe. Three quarters of the Belgian population speaks at least one foreign language and about the same percentage can express itself in at least two foreign languages. However, the high labour costs and the low availability of workers, due to the comparatively low unemployment rate of skilled workforce, make it somewhat less attractive compared to the other countries analysed. In fact high employment costs was a major factor playing in the decision to close plants in 2009 by companies such as Opel, DHL, Chiquita and Samsonite. Although a sign of a strong economy, low unemployment is not always a positive connotation, especially when a company is looking for a place where to relocate its headquarter. In a recent ranking published by the World Bank, Belgium ranked 48th out of 183 countries in terms of workers employment, placing itself well ahead of its EU neighbours, including the Netherlands (123), France (155) and Germany (158).

Belgium is centrally located in Europe, and this surely plays at its advantage. Not only it can be easily reached from most European countries, but it also hosts the headquarters of NATO, the European Council and the European Commission (plus a representations of the European Parliament). This is not only attractive for lobbying purposes, but is a highly attractive factor for expats, who find a lively international community in the major centre of Belgium.

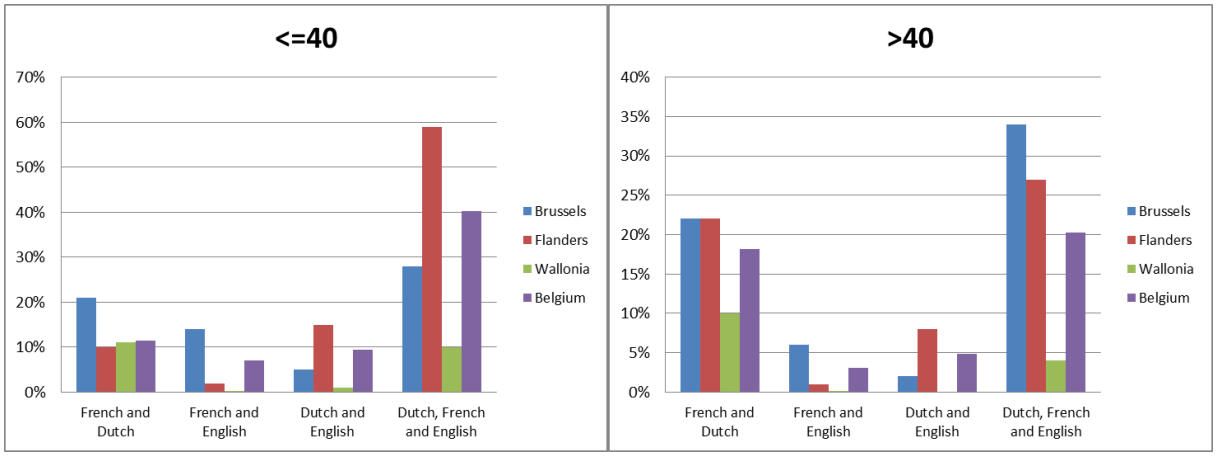
Moreover, Belgium can count on high-quality infrastructure. This includes the ports of Antwerp and Zeebrugge, along with a broad network of roadways connecting the country to European markets. With respect to air transport, the large number of international flights is a major advantage.

Unfortunately, there are no readily-available data on all the relevant location factors at the regional level in Europe and Switzerland. This forced us to conduct our analysis at country level. Some factors, such as education and culture, have a strong regional component. Below we analyse to what extent they may impact the score of Flanders.

Considering language attainment and education, using data at National level can be misleading for Flanders. Studies show that Flanders is different in terms of language capabilities, infrastructure and quality of the workforce. As a result, by comparing Flanders with other countries we are shading some of the advantages and disadvantages of Flanders.

In a 2006 study of the Belgian government statistics office (Statbel) released a study on language knowledge in Belgium, comparing Brussels, Flanders and Wallonia. In this study the authors analysed the knowledge of one, two or three languages, in two separate age groups: people below 40 years old and people above 40 years old. The numbers are calculated by taking a weighted average of the separate numbers for Brussels (1 million inhabitants in 2006), Flanders (6 million in 2006) and Wallonia (3,3 million in 2006). Results are shown in figure 28.

Figure 28: Language spoken by population groups in different Belgian regions in 2006

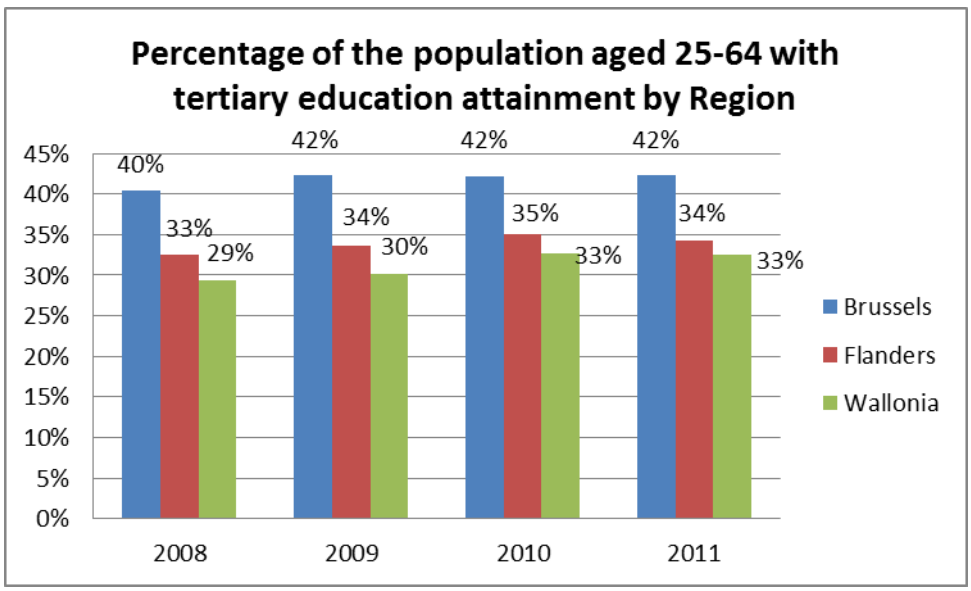


(source: http://statbel.fgov.be/)

Flanders has the highest percentage of young people (<40) who speaks French, Dutch and English. Multi-linguism has gone way up in the age group < 40 years, mostly thanks to more mastering of English. The occurrence of people speaking 3 languages has doubled.

In terms of educational attainment, Figure 29 shows the percentage of the population aged 25 to 64 with tertiary education attainment by Region.

Figure 29: Percentage of the population aged 25 to 64 with tertiary education attainment by Region



(source: Eurostat)

Brussels is the region with the highest percentage of people having reached a high level of education, followed by Flanders and Wallonia. As shown in the picture, the gap between Flanders and Wallonia has been shrinking between 2008 and 2011, from a 2 percentage points difference to only one percentage point.

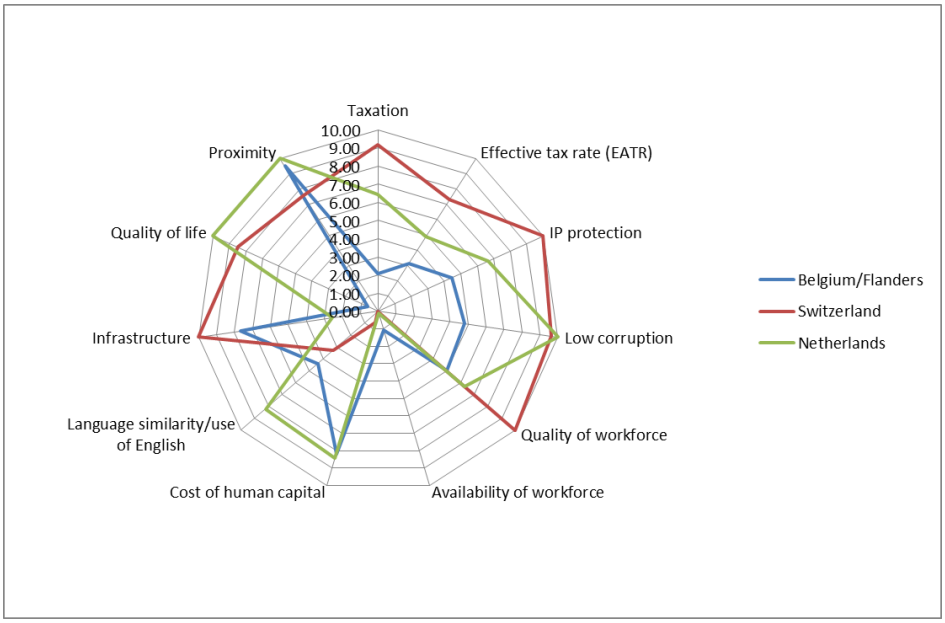
In terms of infrastructure, using data at national level shades some important characteristics of Flanders. Unfortunately, no data is available on infrastructure at regional level. However, it is

important to point out that Flanders benefits from three major maritime ports and from excellent road, rail and inland waterway connections.

7.1.2. Belgium, the Netherlands and Switzerland

Figure 30 offers a graphical representation of the scores of Belgium, The Netherlands and Switzerland.

Figure 30: The performance of Belgium/Flanders compared to Switzerland and The Netherlands



Switzerland owes its first position to a better taxation regime, both in terms of statutory and effective taxation, strong IP protection, a more educated workforce and efficient infrastructures.

The Netherland can count on a high proximity score, good taxation, good institutions and a highly skilled human capital. The Netherland also scores well in terms of quality of life and cost of human capital.

Compared to Switzerland, Belgium can count on a central location at the heart of Europe a lower cost of human capital and better language skills, but scores low on taxation, IP protection, corruption and quality of life.

8. HEADQUARTERS AND R&D: DOES CO-LOCATION REALLY EXIST?

In the three stages of internationalisation model proposed by Braunerhjelm, the relocation of the headquarter constitutes the last phase of internationalisation , preceded by the relocation of the production facilities and of R&D (Braunerhjelm 2003).

Different location drivers affect (re-)location of production, R&D and headquarters. Very few studies look at the co-location of business activities. The most extensive study on colocation of business activities in Europe is the one by Defever (2006). Using a database of 11,000 location choices over 5 years and 23 European countries, Defever finds a high correlation in the location choice of R&D and production plants . He finds no correlation between the location of headquarters and the location of any other part of the firm's value chain, including headquarters.

This absence of co-location of R&D and HQ functions also holds for Flanders.

Data from the "fDiMarkets.com – Cross border investment monitor" database of the Financial Times on new R&D projects in Flanders allows us to analyse to what extent there has been co-location of R&D and headquarters activities in Flanders in the period 2003-2011.

Table 14 shows the distribution of R&D projects across Belgian regions. Flanders was by far the region that attracted the largest share of R&D projects in Belgium, about 75% of the total.

Table 14: R&D projects in Belgium (2003-2011)

Region	Number of R&D projects
Brussels Region	3
Region Wallonne	4
Flanders	20
Total	**27**

(Source: fDiMarkets.com – Cross border investment monitor)

Of the 20 R&D projects executed in Belgium between 2003 and 2011, 17 were new projects, while 3 were expansions of existing facilities (Pfizer in Zaventem, Genzyme in Geel and Toyota Motors).

Belgium is a very attractive location for R&D intensive companies in the Pharmaceutical and Biotechnology sectors (cfr table 15). About 70% of the projects developed between 2003 and 2011 were in R&D intensive sectors, mainly Pharmaceuticals and Biotechnology, while only 4 projects were in low- tech sectors (two in automotive and two in food and tobacco). Half of the projects were executed by US multinationals, three by Japanese MNEs and 7 by European MNEs.

A deeper analysis of each of this projects reveals that most of the companies investing in new R&D facilities in Belgium also invested in production activities.

With 3 large R&D investment projects Janssen Pharmaceutica's parent company, Johnson and Johnson (J&J)[*], established new R&D facilities in Beerse and in Geel, in the province of Antwerp. During the past years Janssen's headquarter in Beerse has more and more centralised the general business functions such as financial coordination, IT and, since 2010, marketing and sales. However, the location of the R&D centres was chosen not to be close to the headquarter functions, but close to the production plants.

Genzyme is another example of R&D located close to production facilities in R&D intensive industries. Genzyme is a US pharmaceutical company active mostly in the development of new drugs to cure specific types of cancer. In October 2001, Genzyme Corporation acquired the Belgian part of Pharming N.V. in Geel, Belgium to develop Genzyme's first bio therapeutics manufacturing facility in Europe. Subsequently, in 2005 and 2006, Genzyme invested about € 162 million to develop new R&D facilities in Geel, close to the production facilities, while keeping its headquarter in Amsterdam, in The Netherlands.

Similarly, Biocartis established a subsidiary in Belgium in 2010 because of the recent acquisition of patent rights for a new detection platform[†] from the University of Gent. The Belgian subsidiary performs both production and R&D activities, while the headquarters of Biocartis are still located in Lausanne, Switzerland.

Pfizer decided to locate production and R&D facilities in five different locations in Belgium because of the "high level of education and the ensuing qualified researcher" (Pfizer press release, 2010). Despite the large investment in production and R&D facilities Pfizer's European headquarters are still located in the UK.

European companies opened R&D subsidiaries in Belgium, attracted by the R&D intensive clusters and the highly educated and specialised human capital, but kept their headquarters in the country of origin. Cenix BioScience, for example, established an R&D subsidiary on the Janssen Pharmaceutica campus in Beerse, while keeping its headquarters in Germany.

[*] Janssen Pharmaceutica was established in Beerse in 1953 and is part of J&J since 1961.
[†] http://www.biocartis.com/cms/index.php?page=multiplex-diagnostics-platform-2

Despite the fact that often R&D is most often co-located with production, cases of co-location of R&D activities and headquarters also exist, but not on the same systematic basis. Mabcure's establishment in Europe is a good example of co-location of R&D activities and headquarters. In 2009 the company decided to open a branch in Europe and chose Belgium, and in particular Hasselt, as a location for the Belgian subsidiary because of the reputation of the Biomed campus of the University of Hasselt in biomedical research activities. Because of the strategic importance of this subsidiary, Mabcure is also planning to relocate its global headquarters to Hasselt. Milliken, a US chemical company, established its European headquarters, R&D and production facilities in Gent.

An example of co-location of headquarters and R&D in a more traditional sector is Toyota Motor Europe (TME). The company first established its European headquarters in Brussels in 1993, to locate it close to its European production facility located in Diest. In 2004 the company decided to locate a new European R&D centre in Zaventem, close to the headquarter.

Investing company	Number of projects	Destination City	Total investment (million €)	Year(s)	Industry Sector	Parent company	Nationality parent company
Janssen Pharmaceuticals	3	Antwerp (Geel and Beerse)	222.25	2004 2005 2006	Pharmaceuticals and Biotechnology	Johnson and Johnson	US
Genzyme	2	Antwerp (Geel)	162.54	2005 2006	Pharmaceuticals and Biotechnology	Genzyme (a Sanofi company)	US
Toyota Motor Europe (TME)	1	Brussels area (Zaventem)	131.55	2004	Automotive Components	Toyota Motors	Japan
Pfizer	2	Brussels area (Zaventem) and Gent	43.43	2004 2010	Pharmaceuticals	Pfizer	US
Biocartis	1	Not Specified	28.69	2010	Biotechnology	Biocartis	Switzerland
MabCure Inc	1	Hasselt	28.69	2009	Biotechnology	MabCure Inc	US
TorreyPines Therapeutics	1	Leuven	28.69	2005	Biotechnology	TorreyPines Therapeutics	US
Cenix BioScience	1	Not Specified	19.81	2011	Pharmaceuticals	Cenix BioScience	Germany
arGEN-X BV	1	Not Specified	16.64	2009	Biotechnology	arGEN-X BV	The Netherlands
Milliken Chemical	1	Gent	8.24	2006	Chemicals	Milliken & Company	US
Diatos	1	Leuven	7.13	2004	Biotechnology	Diatos	France
Continental Teves	1	Mechelen	3.66	2005	Automotive Components	Continental	Germany
Yakult Honsha	1	Gent	2.62	2005	Food & Tobacco	Yakult Honsha	Japan
Nitto Denko	1	Genk	1.98	2005	Plastics	Nitto Denko	Japan
Arcarios	1	Limburg	1.11	2010	Biotechnology	Arcarios	The Netherlands
Biorigin	1	Antwerp	0.07	2010	Food & Tobacco	Zilor	Brasil
Total	**20**		**707.10**	**---**			

Flanders is a very attractive region for R&D intensive companies, especially in the pharmaceutical and biotechnology sectors. Multinationals decide to establish R&D and production facilities in Flanders because of by the highly educated workforce, the clusters and the state-of-the-art infrastructure. However, after relocating production and R&D, the majority of the companies analyse do not relocate their headquarter in Flanders. Headquarters are either kept in the country of origin of the company or, in case of regional headquarters of multinationals, established in more favourable locations, such as the UK, Switzerland and the Netherlands.

9. CONCLUSIONS

Regions are increasingly interested in attracting regional headquarters because of the positive impact of these centres on the economic welfare of the regions through the transfer of capital, managements skills and the spillovers to the rest of the economy.

Our analysis identified four group of factors that play a key role in the decision on where to (re)locate an headquarter: national and regional specific factors, metropolitan factors, industry-specific factors and company-specific factors. Companies that decide to (re)locate their headquarter look for a location that offers low levels of corporate and personal taxation, a strong legal framework that enforces IP right and minimizes the costs related to corruption. Companies also look for places with high quality of life standards. and the presence of an highly educated workforce with a good level of spoken English, especially for global companies. Companies also prefer to be located in areas where other companies are already present and performing similar business functions.

Other factors that influence the final decision are company-related characteristics, such as size, the structure and ownership of a company, its degree of internationalisation, its country of origin and the activities to be decentralized and performed by the regional headquarter.

The importance of these factors was assessed against data coming from 4,920 new headquarter projects executed in the period 2003-2011 and reported in the “fDiMarkets.com – Cross border investment monitor” database of the Financial Times intelligence unit.

The data show that the number of new headquarter projects has increased steadily between 2003 and 2008. The year 2009 was the peak year for the establishment of headquarters abroad, with a total of 760 new headquarters projects. However, since 2010 the trend has become negative. By the end of 2011 the number of new investment projects in headquarters was down by 8% compared to 2009.

At sector level, “software and ICT”, “financial services” and “communication” were the top sectors for new headquarters projects, representing about 38% of the total investment value of new headquarters in the period 2003-2011.

Geographically, the largest number and value of headquarter investment projects are concentrated in a small number of cities. The most important cities in terms of attraction of new headquarters at world level are Singapore, Shanghai and Hong Kong. At European level the UK, Switzerland, Ireland and The Netherlands attracted the largest number of headquarter projects in the period 2003-2011. The South East region of the UK includes the city of London, which alone attracted 233 of the 341 UK projects over the period 2003-2010 (68% of the total). Similarly, Geneva and Zurich attracted respectively 22% and 17 % of all the headquarter projects in Switzerland, Dublin attracted 57% of the projects in Ireland and Amsterdam was the target destination for 65% of the total FDI in headquarters in West-Nederland. This points to the fact that – similarly to what happens in other regions of the world – FDI in headquarters is mainly directed towards large cities.

Flanders is a very attractive location for business activities such as “manufacturing” and “logistics, distribution and transportation” but is relatively less attractive for FDI in headquarters.

We analysed the position of Belgium/Flanders as a destination for FDI in headquarters by means of a comparative analysis. Seven countries in Europe were compared in terms of number and value of headquarter projects and an attractiveness score was calculated for each of the countries. Switzerland led the ranking, thanks to its favourable taxation regime, a highly qualified and multilingual workforce, high quality of life and efficient infrastructure. Belgium/Flanders only reached the 5th position. The non-competitive tax regime, deficient institutions and important red tape, coupled with high labour costs are the prime reasons for the poor performance. The location in the heart of Europe, a highly qualified multilingual workforce and good infrastructure were not able to fully compensate the disadvantages.

It is often asserted that headquarter location in a region goes together with the set-up of R&D operations in the region . However, the literature does not support this assertion. Companies that decentralize R&D operations from the home country do not really show a tendency to co-locate R&D activities and regional headquarters. R&D operations are more often located close to production plants.

Flanders is a very attractive region for R&D intensive companies, especially in the pharmaceutical and biotechnology sectors. Multinationals decide to establish R&D and production facilities in Flanders because of by the highly educated workforce, the clusters and the state-of-the-art infrastructure. However, even after relocating production and R&D, the majority of the companies analysed do not relocate their headquarter to Flanders. Headquarters are either kept in the country of origin of the company or, in case of regional headquarters, established in more favourable locations, such as the UK, Switzerland and the Netherlands.

BIBLIOGRAPHY

Adams S. (2010). Intellectual property rights, investment climate and FDI in developing countries. International Business Research, 3(3): 201-209.

Arthur D.Little (2009). HQ on the Move - Benchmarking of Global and Regional HQ in Switzerland, Trends in HQ Relocations and Headquarters' Redesign. Switzerland: Arthur D. Little.

Baaij M., Van Den Bosch F., Volberda H., and Van den Berghe D. (2004). The International Relocation of Corporate Centres: Are Corporate Centres Sticky? European Management Journal, 22(2): 141-149.

Barner-Rasmussen W., Piekkari R. (2007). Mobility of headquarters in multinational corporations. European journal of International Management, 22(2): 141-149.

Bel G. and Fageda X. (2008). Getting there Fast: globalisation, intercontinental flights and location of headquarters. Journal of economic geography, 8:471-495.

Benito G, Lunnan R, Tomassen S, (2011). Distant encounters of the third kind: multinational locating divisional headquarters abroad. Journal of management studies, 48(2): 373-394.

Becker S. O., Egger P. H., and Merlo V. (2009). How low business tax rates attract multinational HQ: Municipality level evidence from Germany. Centre for economic studies and IFO institute for economic research, Munich, Germany: University of Stirling, Department of economics.

Birkinshaw J., Braunerhjelm P., Holm U. and Terjesen S. (2006). Why do some multinational corporations relocate their HQ overseas? Strategic Management Journal, 27(7): 681-700.

Branstetter L.G., Fisman R. and Foley C.F. (2006). Do stronger intellectual property rights increase international knowledge transfer? Empirical evidence from U.S. firm-level panel data. Quarterly Journal of Economics, 121(1): 321-349.

Braunerhjelm, P. (2003). EU and the location of headquarters: evidence from Sweden 1989 to 1999. Working paper.

Brouwer A.E., Mariotti I. and van Ommeren J.N. (2004). The firm relocation decision: an empirical investigation. The annals of regional science, 38: 335-347.

Campbell A., Goold M. and Marcus A. (1994). Corporate-Level Strategy: Creating Value in the Multibusiness Company. New York: Johan Wiley.

Calgary economic development (2010). Home base: what drives head office location and Calgary's place as a global business hub. Research report.

Chandler A.D. (1991). The functions of the HQ unit in the multibusiness firm. Strategic management journal, 12: 31-50.

Cuervo-Cazurra A. (2006). Who cares about corruption? Journal of International business studies, 37: 803-822.

Davis J., Henderson J. (2008). The agglomeration of the global firm. The World Economy, 32 (9): 1271-1290.

Desai M.A. (2009). The decentering of the global firm. The World economy, 32(9): 1271-1290

Deschryvere, M. (2009). Mobility of corporate HQ functions: A literature review. Helsinki, Finland: ETLA, The Research Institute of the Finish Economy.

De Witte F., Sleuwaegen L. (2009).Foreign Direct investments. Location choices across the value chain. FDC Report

Dunning J.H. (2009). Location and the multinational enterprise: a neglected factor? Journal of international business studies, 40: 5-19

Florida R. L. (2002) The rise of the creative class: And how it's transforming work, leisure, community and everyday life. New York, NY: Basic Books.

Forsgren M., Holm U. and Johanson J. (1995). Division headquarters go abroad – a step in the internationalisation of the multinational corporation. Journal of management studies, 32(4): 475-491.

Franco C., Rentocchini F. and Marzetti G. (2008). Why do firms invest abroad? An analysis of the motives underlying foreign direct investment. Working papers No. 0817.

Friedman J., Gerlowski D. and Silberman J. (1992). What attracts foreign multinational corporations? Evidence from branch plant location in the United States. Journal of regional science, 32(4): 403-418.

Fujita M. and THisse J.F. (2004). Globalisation and the evolution of the supply chain: who gains and who loses? IDE discussion paper No. 5

Ginsburgh V. A. and Weber S. (2006) La dynamique des langues en Belgique, Regards Economiques 42, Institut de Recherches Economiques et Sociales de l'Université Catholique de Louvain

Ghosh C., Rodriguez M. and Sirmans C.F. (1995). Gains from corporate headquarters relocations: evidence from the stock market. Journal of urban economics, 38: 291-311.

Gregory R., Lombard J.R. and Steifert B. (2005). Impact of headquarters relocation on the operating performance of the firm. Economic Development Quarterly, 19(3): 260-270.

Grosse C. U. (2002). Managing communication within virtual intercultural teams. Business Communication Quarterly, 65: 22-38.

Head et al. (1995). Agglomeration benefits and location choice: evidence from Japanese manufacturing investment in the United States. Journal of International Economics, 38:223-247.

Heenan D. A. (1979). The regional HQ decision: a comparative analysis. Academy of Management Journal, 22 (2): 410-415.

Hennart J.-F. and Larimo J. (1998). The impact of culture on the strategy of multinational enterprises: Does national origin affect ownership Strategy? Journal of International Business Studies, 29(3): 515-538.

Hofstede G. (1994). The business of international business is culture. International Business Review,3: 1-14.

Holt J., Purcell W., Gray S. J. and Pedersen T. (2006). Decision Factors Influencing MNEs Regional HQ Location Selection Strategies. Fredriksberg, Denmark: SMG Working Paper No. 12/2006.

Klier T. and Testa W. (2002). Location trends of large company headquarters during the 1990s. Economic perspectives, 26(2): 12-25.

Krohe Jr. J. (2009). Location? Location? Location? Does it really matter where your company is headquartered?. Conference Board Review (pp. 16-25). Chicago: James Krohe Jr.

Kwok C. and Tadesse S. (2006)The MNC as an Agent of Change for Host-Country Institutions: FDI and Corruption. Journal of International Business Studies , 37 (6): 767-785.

Laamanen T., Simula T. and Torstila S. (2011). Cross-border relocations of headquarters in Europe, Journal of international business studies 43: 187–210.

Lasserre P. (1996). Regional headquarters: the spearhead for Asia Pacific markets. Long Range Planning, 29(1): 30-37

Lindholm J. (2009). The relocation of functional headquarters – on the drivers and implication of location of corporate functions abroad. Helsinki School of Economics

Luo Y. and Shenkar O. (2006). The multinational corporation as a multilingual community: language and organisation in a global context. Journal of international business studies, 37: 321-339.

Pirinsky C., Wang Q., (2006). Does Corporate Headquarters Location Matter for Stock Returns? The Journal of Finance, 61(4):1991-2015.

Porter M.E. (1990). The competitive advantage of Nations. London, Mc-Millan Press

Storper M. and Venables A.J. (2004). Buzz: face-to-face contact and the urban economy. Journal of Economic Geography, 4(4): 351-370.

Strauss-Kahn V. and Vives X.,(2009). Why and where do headquarters move? Regional Science and Urban Economics, 39(2): 168-186.

Testa W. (2006). Headquarters research and implications for local development. Economic Development Quarterly, 20: 111-115.

van den Berghe D. (2005). EUROPEAN HQ: Location Decisions and establishing sequential company activities. Utrecht: Ernst & Young International Location Advisory services.

Voget J (2010). Relocation of headquarters and international Taxation. Centre for Business Taxation, Oxford University.

ANNEX 1 – LIST OF REGIONS IN ALPHABETICAL ORDER

A	East Midlands (UK)	Macroregiunea patru	Ouest (FR)	Södra Sverige
Alföld és Észak	East of England	Macroregiunea trei	**R**	South East (UK)
B	Eesti	Macroregiunea unu	Região Autónoma da Madeira (PT)	South West (UK)
Baden-Württemberg	Éire/Ireland	Manner-Suomi	Região Autónoma dos Açores (PT)	Sud
Bassin Parisien	Est (FR)	Mecklenburg-Vorpommern	Region Centralny	Südösterreich
Bayern	Este (ES)	Méditerranée	Région de Bruxelles-Capitale	Sud-Ouest (FR)
Berlin	**H**	**N**	Region Pólnocno-Zachodni	Sur (ES)
Brandenburg	Hamburg	Niedersachsen	Region Pólnocny	T
Bremen	Hessen	Noord-Nederland	Region Poludniowo-Zachodni	Thüringen
C	**I**	Nord - Pas-de-Calais	Region Poludniowy	V
Canarias (ES)	Île de France	Nord-Est	Région wallonne	Vlaams Gewest
Centre-Est (FR)	Isole	Nord-Ovest	Region Wschodni	W
Centro (ES)	**K**	Nordrhein-Westfalen	Rheinland-Pfalz	Wales
Centro (IT)	Közép-Magyarország	Noreste (ES)	**S**	West Midlands (UK)
Ceská republika	Kypros/Kibris	Noroeste (ES)	Saarland	West-Nederland
Comunidad de Madrid	**L**	North East (UK)	Sachsen	Westösterreich
Continente	Latvija	North West (UK)	Sachsen-Anhalt	**Y**
D	Lietuva	**O**	Schleswig-Holstein	Yorkshire and The Humber
Danmark	London	Oost-Nederland	Scotland	Yugozapadna i yuzhna tsentralna Bulgaria
Dunántúl	**M**	Ostösterreich	Severna i iztochna Bulgaria	**Z**
E	Macroregiunea doi	Östra Sverige	Slovenská republika	Zuid-Nederland

KNOWLEDGE PARTNER

ISBN-NUMMER: 9789078858980
D/2013/11.885/03

FLANDERS DISTRICT OF CREATIVITY VZW

DIESTSEVEST 76, B-3000 LEUVEN
T +32 16 24 29 24 **F** +32 16 24 88 44
INFO@FLANDERSDC.BE